



Community & Economic Development Department
4430 S. Adams County Pkwy.
1st Floor, Suite W2000B
Brighton, CO 80601
PHONE 720.523.6800
EMAIL epermitcenter@adcogov.org
adcogov.org

Request for Comments

Case Name: Remora Oil Gathering Pipeline

Case Number: PRC2025-00023

at 6:00 pm

December 5, 2025

The Adams County Planning Commission is requesting comments on the following application: **1. Conditional Use Permit for a 10-inch natural gas pipeline; 2. Conditional Use Permit for a 10-inch crude oil pipeline.** This request is located at 2150 MANILLA RD. The Assessor's Parcel Number is 0181700000276, 0181735200001.

Applicant Information: Elevation Midstream
CALEB WATKINS
1200 17TH STREET

Please forward any written comments on this application to the Community and Economic Development Department at 4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601-8216 or call (720) 523-6800 by in order that your comments may be taken into consideration in the review of this case. If you would like your comments included verbatim please send your response by way of e-mail to GJBarnes@adamscountyco.gov.

Once comments have been received and the staff report written, the staff report and notice of public hearing dates may be forwarded to you upon request. The full text of the proposed request and additional colored maps can be obtained by contacting this office or by accessing the Adams County web site at www.adcogov.org/current-land-use-cases.

Si usted tiene preguntas, por favor escribanos un correo electrónico a cedespanol@adcogov.org para asistencia en español. Por favor incluya su dirección o número de caso para poder ayudarle mayor.

Thank you for your review of this case.

Greg Barnes
Planner - Principal

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica
DISTRICT 1

Kathy Henson
DISTRICT 2

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DISTRICT 3

Steve O'Dorisio
DISTRICT 4

Lynn Baca
DISTRICT 5



CONDITIONAL USE PERMIT

Conditional uses are those uses which are presumptively compatible with other land uses authorized or permitted in a zone district, but, if approved, will require more discretionary review than those uses which are authorized. In addition to meeting applicable performance standards, conditional uses may require the imposition of conditions to ensure the number and type of conditional uses and their location, design, and configuration are appropriate at a particular location.

Required Checklist Items

- Development Application Form (pg. 5)
- Written Explanation
- Site Plan
- Landscape Plan
- Proof of Ownership (warranty deed or title policy)
- Proof of Water, Sewer Services, and Utilities
- Legal Description
- Statement of Taxes Paid
- Trip Generation Analysis

Supplemental items may be needed on a case-by-case basis. ***Email documentation will be required if supplemental items are deemed unnecessary.**

- Please contact the Planner of the Day (CEDD-Plan@adcogov.org) to determine whether a Neighborhood Meeting is necessary.
- Please contact the Engineer of the Day (CEDD-ENG@adcogov.org) to determine whether a Level 1 Storm Drainage Study is necessary

If you are applying for any of the following applications, please contact the Planner of the Day:

- Solid waste transfer station
- Scrap tire recycling facility
- Inert fill

Fees Due When Application is Deemed Complete	
Conditional Use Permit	Residential Use: \$1,200 (Additional Requests: \$400) Non-Residential Use: \$1,400 (Additional Requests: \$600)

Conditional Use - Guide to Development Application Submittal

This application shall be submitted electronically to epermitcenter@adcogov.org. If the submittal is too large to email as an attachment, the application may be sent as an unlocked Microsoft OneDrive link. Alternatively, the application may be delivered on a flash drive to the One-Stop Customer Service Center. All documents should be combined in a single PDF, although you may provide multiple PDFs to ensure no file exceeds 100 MB. Once a complete application has been received, fees will be invoiced and payable online at www.permits.adcogov.org.

Written Explanation

- A clear and concise description of the proposal. Please include description of use, time frame, purpose of project, proposed improvements, and all other relevant details.

Site Plan

- A detailed drawing of existing and proposed improvements, including:
 - Streets, roads, and intersections
 - Driveways, access points, and parking areas
 - Existing and proposed structures, wells, and septic systems,
 - Easements, utility lines, and no build or hazardous areas
 - Scale, north arrow, and date of preparation
- Parking: must meet the quantity, dimensional standards and other requirements outlined in Section 4-15
- An Improvement Location Certificate or Survey may be required during the official review
- Elevations

Landscape Plan

- Landscaping must meet the requirements outlined in Section 4-19 of the Adams County Development Standards and Regulations
- Landscape plan must include:
 - Number, installation size, and location of each plant type
 - Landscape maintenance plan
 - Bufferyards: identify the uses of adjacent properties and incorporate the correct bufferyard between existing and proposed use

Proof of Ownership

- A deed may be found in the Office of the Clerk and Recorder.
- A title commitment is prepared by a professional title company.

Proof of Water/Sewer/Utilities

Water

- A written statement from the appropriate water district indicating that they will provide service to the property OR a copy of a current bill from the service provider.
- Well permit(s) information can be obtained from the Colorado State Division of Water Resources at (303) 866-3587.

Sewer

- A written statement from the appropriate sanitation district indicating that they will provide service to the property OR a copy of a current bill from the service provider.
- A written statement from Tri-County Health indicating the viability of obtaining Onsite Wastewater Treatment Systems.

Utilities (Gas, Electric, etc.)

- A written statement from the appropriate utility provider indicating that they will provide service to the property.
- Copy of a current bill from the service provider.

Legal Description

- Geographical description used to locate and identify a property.
- Visit <http://gisapp.adcogov.org/quicksearch/> to find the legal description for your property.

Statement of Taxes Paid

- All taxes on the subject property must be paid in full. Please contact the Adams County Treasurer's Office or visit ADCOTAX.COM

Trip Generation Analysis (TGA)

- This analysis should be conducted by a traffic engineer and should include total vehicle trips per day and peak hour volumes generated by the proposed development.
- A Traffic Impact Study may be required after the first review.

SUPPLEMENTAL:**Neighborhood Meeting Summary**

- Please refer to Section 2-01-02 of the Adams County Development Standards and Regulations for the specific requirements regarding time, location, and notice.
- A written summary shall be prepared including the materials submittal presented at the meeting, any issues identified at the meeting, and how those issues have been addressed.

Level 1 Storm Drainage Study

- If the proposed conditional use permit involves paving, construction of any structures, grading of property, outdoor storage of materials (gravel piles included) or otherwise increasing the impervious area of a site, a Level 1 Storm Drainage Study will be required.
- This plan should be prepared in accordance with the "Level 1 Storm Drainage Plan" criteria as defined in Appendix item B-3 of the Adams County Development Standards and Regulations. Most importantly, it needs to clearly identify a viable storm outfall location, and floodplain/floodway boundaries.



DEVELOPMENT APPLICATION FORM

APPLICANT

Name(s):	<input type="text"/>	Phone #:	<input type="text"/>
Address:	<input type="text"/>		
City, State, Zip:	<input type="text"/>		
2nd Phone #:	<input type="text"/>	Email:	<input type="text"/>

OWNER

Name(s):	<input type="text"/>	Phone #:	<input type="text"/>
Address:	<input type="text"/>		
City, State, Zip:	<input type="text"/>		
2nd Phone #:	<input type="text"/>	Email:	<input type="text"/>

TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)

Name:	<input type="text"/>	Phone #:	<input type="text"/>
Address:	<input type="text"/>		
City, State, Zip:	<input type="text"/>		
2nd Phone #:	<input type="text"/>	Email:	<input type="text"/>

DESCRIPTION OF SITE

Address:

City, State, Zip:

Area (acres or square feet):

Tax Assessor
Parcel Number

Existing
Zoning:

Existing Land
Use:

Proposed Land
Use:

Have you attended a Conceptual Review? YES ☐ NO ☐

If Yes, please list PRE#:

I hereby certify that I am making this application as owner of the above-described property or acting under the authority of the owner (attached authorization, if not owner). I am familiar with all pertinent requirements, procedures, and fees of the County. I understand that the Application Review Fee is non-refundable. All statements made on this form and additional application materials are true to the best of my knowledge and belief.

Name:

Date:

Owner's Printed Name

Name:

Janice Kinnin

Owner's Signature

Rocky Mountain Midstream, LLC

Natural Gas Pipeline Project Conditional Use Permit Application

November 24, 2025

Prepared for:



4430 South Adams County Parkway
Brighton, CO 80601

Prepared by:



Rocky Mountain Midstream, LLC
13781 Pacific Circle
Mead, CO 80542

Introduction

Rocky Mountain Midstream, LLC (Rocky Mountain Midstream), a subsidiary of the Williams Companies, Inc. (Williams), proposes to construct, own, and operate up to a 10-inch nominal outside diameter natural gas pipeline (Project). The Project is a joint pipeline project with DJ South Gathering, LLC (DJ South), a subsidiary of Elevation Midstream, LLC (Elevation) who, under a separate Conditional Use Permit application, proposes to construct up to a 10-inch nominal outside diameter crude oil pipeline.

1. Conditional Use Permit and Application

The Adams County Development Application is included as part of this permit package as an attachment to the cover letter.

2. Application Fees

The application fee for the CUP permit review fee is included with this application.

3. Written Explanation of the Project

3.1 Project Overview

The Project will be a natural gas gathering line originating at Occidental Petroleum Corporation's Remora pad site located on Parcel 1981-00-0-00-244, Section 6, Township 4 South, Range 63 West, in Arapahoe County (Arapahoe County USR # AE24-006) and ending at Rocky Mountain Midstream's Watkins Compressor Station, parcel 0181735200001, Section 35, Township 3 South, Range 64 West, 2150 Manilla Rd., Adams County.

The route selected is deemed to be the most direct route which will minimize impact to landowners, minimize cost, and maximize safety during construction. From south of I-70, the Project will cross I-70 onto one Adams County parcel for approximately 0.45 miles, specifically crossing south to north on parcel # 0181700000276, Section 35, Township 3 South, Range 64 West.

Arapahoe County is reviewing approximately 2 miles of the proposed route within their jurisdiction under application Q25-060.

The Remora Pad Site in Arapahoe County, being the pipeline's originating point, is under its final review of USR # AE24-006. The final item of review is of an access road currently being addressed with the Arapahoe County Planner prior to being presented before the Planning Committee and Board of County Commissioners.

This Project was reviewed during an Adams County Conceptual Review meeting (PRE2025-00044) held on July 9, 2025. The Adams County Review Team Comments are included with this application as Exhibit A. Rocky Mountain Midstream's responses to the Review Team Comments can be found in Section IV.

3.2 Purpose and Need

The purpose of the Project is to allow for efficient pipeline transportation from Occidental's crude oil and gas production facility in Arapahoe County to Rocky Mountain Midstream's Watkins Compressor Station. The proposed pipeline is essential for transporting natural gas generated at Occidental's Remora pad site.

3.3 Project Standards

Rocky Mountain Midstream will ensure the Project obtains applicable land use, environmental, and construction permits, and will ensure permit conditions are met prior to the start of construction. Rocky Mountain Midstream will comply with the Colorado ECMC 1100 Rules as they pertain to gathering lines as well as comply with the Adams County CUP and Development Agreement requirements. Rocky Mountain Midstream will utilize the following best management practices during construction of the Project per, and in addition to, the above cited codes, agreements and regulations:

- Construction limited to 7 am to 7 pm Monday – Saturday, exceptions by approval only.
- Horizontal Directional Drilling of I-70, only at the hours approved of the Colorado Department of Transportation.
- GIS as-built data submission following in-service date.
- Stormwater Management per an established Stormwater Management Plan (SWMP).
- Minimum 4' of cover on all buried lines.

3.4 Pipeline

The Project will consist of the construction of approximately .45 miles of up to a 10-inch nominal outside diameter natural gas gathering pipeline and associated interconnect appurtenance in Adams County. DJ South is seeking a permanent easement with the landowner for its pipeline that is approximately 30 feet wide as well as an additional 45 feet of temporary easement for pipeline construction, together with additional temporary workspace to accommodate necessary directional drilling equipment at all bore entry and exit points.

To date, Rocky Mountain Midstream and DJ South have conducted a detailed routing effort to identify a preferred route. Pipeline construction often results in minor changes to the pipeline centerline within the permanent easement because of information gathered during construction. Rocky Mountain Midstream will alert Adams County if information gathered in the field resulted in a change in the permanent easement and will provide as-built spatial data identifying the pipeline centerline to Adams County upon completion of construction.

Rocky Mountain Midstream's construction contractor will install the pipeline using mechanically excavated open-cut trenching techniques and directional drilling techniques. The pipeline will be buried at a minimum depth of 48 inches of cover or more. Rocky Mountain Midstream's construction contractor will string pipe segments along the ditch line, weld sections together, and lower the pipeline into the open cut ditches. Each weld joint will be non-destructively tested and logged by a data recorder with the results audited by qualified technicians, then lowered into the trench and backfilled. Upon completion of construction, the pipeline will be hydrostatically pressure tested to industry standards and Colorado ECMC rules prior to operations.

Rocky Mountain Midstream proposes to cross CDOT Interstate 70 via horizontal directional drilling (HDD). Within Adams County no municipal roads, county roads, floodplains, wetlands, nor streams, ditches, nor other existing infrastructure will be crossed.

3.5 Above-Ground Appurtenances and Construction Laydown Areas

Rocky Mountain Midstream will use an area on their parcel 0181735200001, 2150 Manilla Rd. to stage equipment and materials for Project construction. Rocky Mountain Midstream does not anticipate using additional temporary workspaces in unincorporated Adams County besides those located along the pipeline route that will be used to excavate trench, weld pipeline segments, deliver the HDD equipment and pipe segments, excavate HDD entry or receiving pits, temporarily stockpile excavated soil from the pits, and serve as laydown for pipe segments. Rocky Mountain Midstream's construction contractor will backfill, compact, and restore and revegetate the pipeline trench upon completion of the pipe installation. Following construction, the contractor will return temporary workspaces to pre-construction conditions.

3.6 Project Construction

Rocky Mountain Midstream is seeking permanent easements that are approximately 30 feet wide and an additional 45 feet of temporary easements for the Project pipeline construction. The pipeline construction will consist of trenching, welding the pipeline, and placing the pipeline within the open trench, backfilling the trench, and restoring the land according to landowner agreements. In addition, this phase will include pipeline HDD installation for the CDOT I-70 bore.

3.7 Surface Restoration

Upon completion of the construction, Rocky Mountain Midstream's restoration contractor will remove construction materials and debris from the site. Temporary workspaces will be re-contoured to pre-construction conditions. Disturbed areas where vegetation was removed by construction activities to an extent that it caused potential soil erosion will be treated with seedbed preparation techniques, re-seeded with an approved seed mixture, and mulched as necessary during the planting season according to landowner agreements.

The Project will utilize a Stormwater Management Plan (SWMP) for implementation of best management practices (BMPs) to mitigate soil erosion, control noxious weeds, and revegetate disturbed areas. Mature vegetation will be actively avoided, although some vegetation will be impossible to avoid and therefore will be replaced per the property owner's reasonable request with a like species.

Rocky Mountain Midstream will repair or replace any Adams County infrastructure damaged by construction of the Project to pre-construction conditions.

3.8 Testing and Commissioning

The commissioning phase consists of testing and cleaning the pipeline and associated facilities. Before the pipeline is put into service, it will undergo hydrostatic pressure testing, i.e., filled with water and tested to verify the structural integrity and workmanship of the pipeline per manufacturers recommendation along with industry practice, rules and regulations. Additionally, the test will ensure that no leaks are present. All hydrostatic test water will be collected in frac tanks and transported and disposed at an approved facility.

3.9 Construction Schedule

Construction is proposed to start in Q2 2026 or Q3 2026, pending receipt of all required permits and agreements and will be based on requested construction timelines from various landowners. Based on a construction start date of Q2 2026, construction is anticipated to be completed no later than Q4 2026 with operations immediately following completion of construction. Table 1 summarizes the Project's anticipated schedule in Adams County.

Table 1:

Project Schedule

Project Schedule Milestone	Approximate Milestone Date
Adams County Neighborhood Meeting	November 1, 2025
CUP Application Filed with Adams County	November 24, 2025
Anticipated Adams County Planning Commission Hearing	March 10, 2026
Anticipated Board of County Commissioners (BOCC) Hearing	April 14, 2026
Anticipated Development Agreement Signed by BOCC	May 14, 2026
Begin Construction Adams County	Q2 2026
Pipeline Testing	Q3 2026
Project In-Service	Q4 2026

3.10 Traffic Statement

Rocky Mountain Midstream will utilize State Highways and paved roads where possible, as these are typically built for larger vehicles. Rocky Mountain Midstream will also obtain any overweight/oversized permits if necessary.

Construction traffic will primarily use Interstate Highway I-70 and Manilla Rd. Pipe will be delivered directly to the right of way via existing access points off Manilla Rd. All trucks will be scheduled prior and will arrive during regular construction hours.

Truck loads will not exceed CDOT requirements for weight limits. They will haul the equipment into the site and remove it from the site at the end of construction.

Following completion of construction there will be up to 2 employees to perform the monthly/quarterly inspection/maintenance trip. The operation and maintenance of the pipeline will be performed by trained and qualified operators and pipeline technicians.

A traffic letter is included with this submittal as Exhibit C.

3.11 Safety

Rocky Mountain Midstream is committed to safety and the Project will comply with all federal, state, and local rules and regulations to provide safe, reliable service. The Colorado ECMC will regulate the Project under 1100 Series Rules for gathering lines and 1000 Series Rules, which reference various technical standards and design, installation, construction reclamation, and operating/integrity management requirements. The Colorado ECMC will have the authority to inspect the Project, and Rocky Mountain Midstream will be required to notify the Colorado ECMC of the Project 10 days prior to the start of construction.

The Project has been submitted to the Bennett-Watkins Fire District for review. Emergency response procedures will be described in an Emergency Response Plan for the Project, which can be provided to Adams County upon request.

3.12 Routine Maintenance

Routine maintenance of the Project facilities will be performed as outlined in Rocky Mountain Midstream's internal operating standards and practices and written maintenance procedures, which meet or exceed regulatory requirements. Maintenance activities associated with the Project will include, but are not limited to:

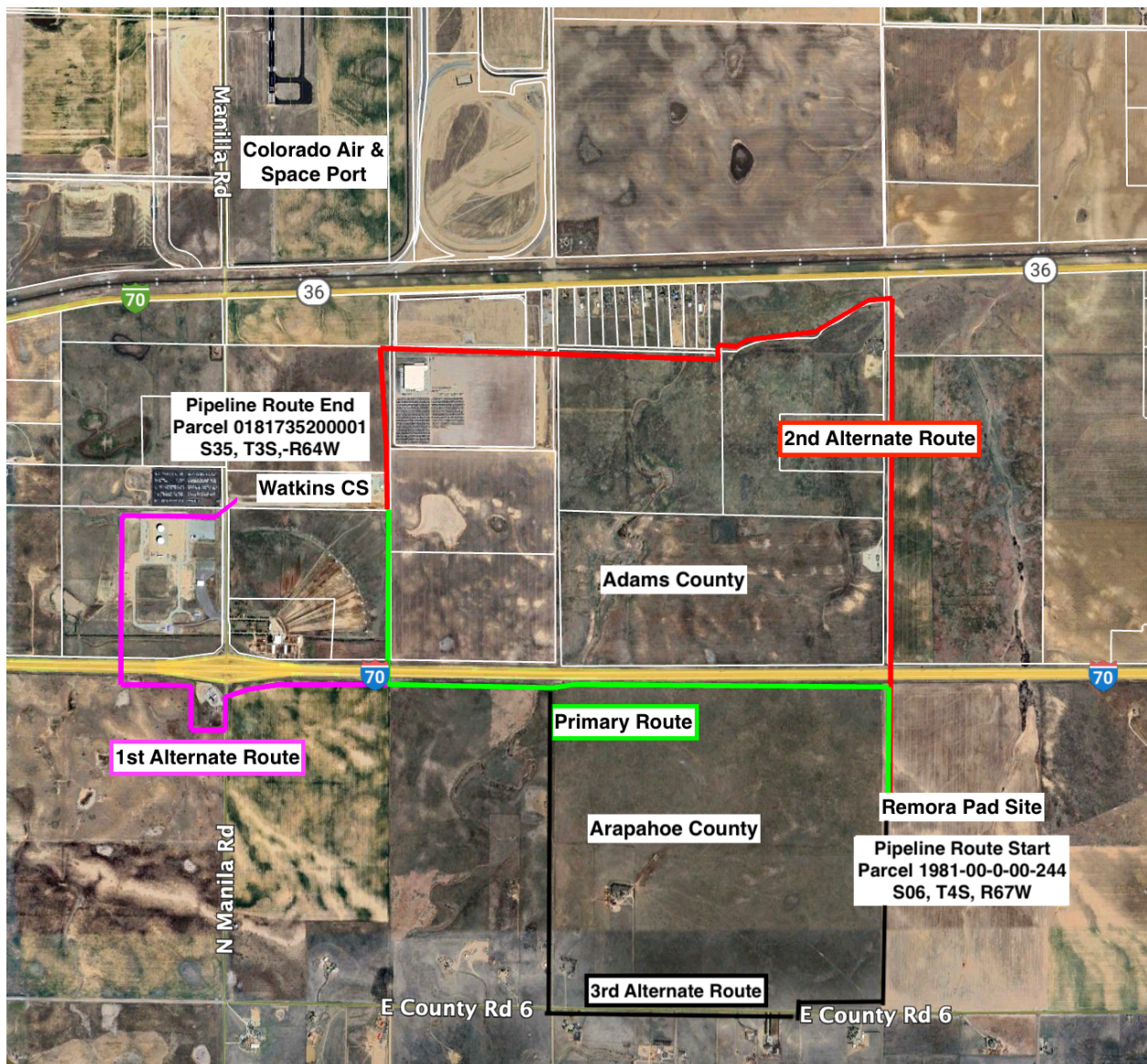
- Implement a damage prevention program, including observation of any construction activities by others on or near the permanent easement.
- Maintain cathodic protection.
- Participate in the State of Colorado's one-call program and responding to one-calls.
- Install and maintain pipeline markers.
- Conduct biweekly aerial pipeline patrols.
- Conduct regular maintenance cleaning.
- Inspect isolation valves.

- Inspect crossings by other pipelines, highways, railroads and utilities.
- Inspect and maintain safety, control, mechanical and electrical equipment.
- Maintain communication equipment.
- Calibrate all instruments per manufacturers recommendations.

4. Site Plan Showing Proposed Development

An overview of the Project is included as Figure 1. Alignment sheets according to CUP Application standards showing existing and proposed improvements for the entire gathering system are provided as Exhibit B.

Figure 1:
Project Overview



5. Landscape Plan

Landscaping is not applicable to this Project.

6. Proof of Ownership (Warranty Deed or Title Policy)

As stated in the introduction of this application, Rocky Mountain Midstream is jointly developing this project with DJ South. DJ South has acquired, or is currently acquiring, Right of Way agreements across all impacted parcels. Each right of way will allow for the installation for up to three pipelines. Pursuant to confidential commercial agreements between DJ South and Rocky Mountain Midstream, DJ South is obligated to partially assign to Rocky Mountain Midstream a 50% interest in the acquired Rights of Way prior to commencement of construction of the proposed pipelines. A copy of the agreed upon form of assignment is included as Exhibit D. This coordinated approach to the land rights acquisition and shared Rights of Way will lead to a reduced overall encumbrance to the landowners, thereby preserving property rights, and decreasing the overall footprint of pipeline operations in the area.

A Letter of Authorization from the landowner with whom an executed ROW agreement is being secured for the Project are included with this submittal as Exhibit E.

Secured easements and executed ROW agreements will authorize the right to construct, operate, and maintain the Project on privately and publicly owned properties, and will allow for the proposed assignment to take place via the contract language. Currently, easements are in place for a majority of the Project route within both Adams County and Arapahoe County. A list of parcels and ROWs within unincorporated Adams County and Arapahoe County on which the Project will be constructed is included in Table 2.

Table 2
Parcel & ROW Crossing Summary

Parcel / ROW	Section / Township / Range	Owner	Jurisdiction
198100000244	S6, T4S, R63W	AJS Management Co., LLC	Arapahoe County
198100000243	S6, T4S, R63W	John Krupa, Steven Krupa, Adam Aduagalski	Arapahoe County
N CR 121 / N Schumacker Rd.	S6, T4S, R63W / S1, T4S, 64W	Arapahoe County	Arapahoe County
197900000385	S1 T4S R64W	Prosper Farm Investments, LLC	Arapahoe County
197900000463	S2 T4S R64W	Marilyn Cloud, David Michael Cline, Linda Irene Jeannelle	Arapahoe County
S Last Change Rd	S2 T4S R64W	Arapahoe County	Arapahoe County
197900000116	S2 T4S R64W	Epic Estates Denver 170 LLC	Arapahoe County
I-70	S2 T4S R64W / S35 T3S R64W	CDOT	Arapahoe County Adams County
0181700000276	S35 T3S R64W	The Lewis Family Trust	Adams County
0181735200001	S35 T3S R64W	Rocky Mountain Midstream, LLC	Adams County

7. Proof of Water and Sewer Services

7.1 Water

Rocky Mountain Midstream's construction contractor will use water during construction for dust suppression, weed control, soil conditioning, and testing of the pipeline. Rocky Mountain Midstream's construction contractor will obtain water under permit or delivered to the site as needed from local supplier and will not require a municipal water supply.

7.2 Sewer

The operation of the Project will not require water or sanitary services. Temporary sanitary facilities will be provided for construction workers along the pipeline ROW during construction.

7.3 Proof of Utilities (eg Gas and Electric)

A utility connection is not required to construct or operate the Project.

8. Legal Descriptions

Table 3 lists the legal descriptions for the parcels crossed by the Project.

Table 3:

Parcel & ROW Crossing Summary

Parcel	Owner	Legal Description
198100000244	AJS Management Co., LLC	Sw 1/4 Nw 1/4 Ex Roads & Ex M/R Sec 6-4-63
198100000243	John Krupa, Steven Krupa, Adam Adualski	Nw 1/4 Nw 1/4 Sec 6-4-63 Ex Roads & Ex M/R
197900000385	Prosper Farm Investments, LLC	Sec 01-4-64 Ex S 2610 Ft Of The W 1350.02 Ft & Ex Roads & Ex M/R's Sec 01-4-64
197900000463	Marilyn Cloud, David Michael Cline, Linda Irene Jeannelle	That Part Of The E 1/2 Of Sec 2-4-64 Desc As Beg 30 Ft N Of The S 1/4 Corner Of Sd Sec Th N To A Pt On The S Row Line Of I-70 Th E 1615 Ft Th S To A Pt 30 Ft N Of The S Line Of Sd Sec Th E To A Pt 1605 Ft E Of The S 1/4 Corner Th N 5100 Ft M/L Th W 1538 Ft Th S To Beg Tog With That Part Of The E 1/2 Of The E 1/2 Of Sd Sec Lying Between I-70 & Peterson Road Ex M/R's Sec 2-4-64
197900000116	Epic Estates Denver 170 LLC	W 1/2 Ex S 1/2 Sw 1/4 & Ex Rds And Ex M/R's 2-4-64
0181700000276	The Lewis Family Trust	SECT,TWN,RNG:35-3-64 DESC: SW4 EXC HIWAY AND EXC PARC 110/865A
0181735200001	Rocky Mountain Midstream, LLC	SECT,TWN,RNG:35-3-64 DESC: A PORT OF THAT PARC DESC IN QC IN REC NO 2009000084336 SD PARC BEING PT OF THAT PARC DESC IN QC IN REC NO 2022000057586 AND BEING A PORT OF THE NW4 OF SEC 35 DESC: BEG AT THE W4 COR OF SD SEC 35 TH N 01D 09M 46S W ALG THE W LN OF THE NW4 OF SD SEC 35 A DIST OF 600/35 FT FROM WHICH THE N 1/16 COR OF SD SEC 35 BRS N 01D 09M 46S W A DIST OF 707/86 FT TH S 89D 24M 38S E DEPARTING SD LN A DIST OF 60 FT

		AND CONT A TOTAL DIST OF 2639/89 FT M/L TO A SET IN THE E LN OF THE NW4 OF SEC 35 FROM WHICH THE CEN N 1/16 COR OF SD SEC 35 BRS N 00D 24M 39S W A DIST OF 715/70 FT TH S 00D 24M 39S E ALG SD LN A DIST OF 600/16 FT M/L TO THE CEN 4 COR OF SD SEC 35 N 89D 24M 38S W ALG THE S LN OF THE NW4 OF SD SEC PASSING AT A DIST OF 2602/01 FT AND CONT FOR A TOTAL DIST OF 2632/01 TO THE POB 36/312A
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9. Certificate of Taxes Paid

Prior to commencement of construction activities, Rocky Mountain Midstream will obtain applicable easements and executed ROW agreements for the pipeline. As easement holder, Rocky Mountain Midstream is not responsible for the payment of property taxes on the parcels; they remain the responsibility of the landowner.

10. Certificate of Notice to Mineral Estate Owners and Lessees

Pursuant to Colorado Revised Statutes (CRS) Section 24-65.5-102 (2)(a), a pipeline does not constitute an “application for development” that will trigger the requirements of the Mineral Estate Owners Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

11. Notice of Surface Development

Pursuant to CRS Section 24-65.5-102 (2)(a), a pipeline does not constitute an “application for development” that will trigger the requirements of the Surface Development Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

Supplemental CUP Information

I. Neighborhood Meeting

Rocky Mountain Midstream held a neighborhood meeting from 8:00 AM – 11:00 AM on Saturday, November 1, 2025, at the Colorado Air and Space Port (5200 Front Range Pkwy, Watkins, CO). The purpose of the neighborhood meeting was to provide the community a description of the Project and answer related questions from the attendees. A copy of the notification, neighborhood meeting materials, and a summary of the neighborhood meeting is provided in Exhibit F.

II. Environmental

i. Description of Threatened or Endangered Animal Species Habitat

The Project is in a highly developed area that includes existing agriculture, oil and gas development, urban development (e.g., residences) and transportation infrastructure (i.e., roads, paths, railroads). During the field survey, SWCA Environmental Consultants (SWCA) did not observe any suitable habitat for federally and/or state-listed threatened and endangered species. The project acreage does not

overlap with any designated critical habitat for federally listed species. The results of the threatened and endangered species field survey can be found in the Natural Resources Report included with this submittal as Exhibit G.

ii. Areas of Paleontological, Historic or Archaeological Importance

Results of the cultural resource search indicate that nine cultural resources have been previously recorded in the study area, none of which intersect the Project area within Arapahoe County. The Project area has historically been used as agricultural land since at least the late 1940s, indicating that the top layer of soil has been continuously disturbed for decades, which makes the presence of intact archaeological deposits on the ground surface or shallowly buried unlikely.

The Project does not have a federal nexus and, as such, is not subject to compliance with Section 106 of the NHPA. The Arapahoe County 1041 regulations governing permitting of areas and activities of state interest, including major facilities of a public utility, indicate that proposed projects shall not significantly degrade areas of paleontological, historic, or archaeological importance (Arapahoe County 2006). There are no cultural resources identified within this desktop review considered to be of historic or archaeological importance, therefore, SWCA recommends no further work regarding cultural resources within the Arapahoe County Project area. The results of the cultural resources search can be found in the Cultural Resources Report included with this submittal as Exhibit H.

iii. Wetlands and Waters of the U.S.

No wetlands or waterbodies were identified within the Survey Area.

iv. Unanticipated Encounters

If a discovery of an unanticipated natural, cultural, or unique environmental resource is encountered during construction, employees will immediately contact the designated Rocky Mountain Midstream environmental/natural resource specialist.

III. Emergency Response

Rocky Mountain Midstream's site-specific Emergency Response Plan establishes emergency protocols for the new natural gas pipeline and associated facilities constructed. The purpose of this plan is primarily to minimize the hazard to the public, Rocky Mountain Midstream employees and to property and secondarily to reestablish service should a service interruption occur. The plan will establish procedures and defines responsibilities prior to, during, and following an emergency and includes contact information and instructions for all such anticipated emergency situations. The plan describes the specific responsibilities of Rocky Mountain Midstream responders including dispatchers and emergency responders. A copy of the Emergency Response Plan is included with this submittal as Exhibit J.

IV. Conceptual Review Comments and Responses

Below are Rocky Mountain Midstream's responses to staff comments received prior to the Conceptual Review (PRE2025-00044) was held on July 9, 2025.

Planner Review – Greg Barnes

PLN01: A Conditional Use Permit application is required (Section 2-02-09), which shall also address and include all submittal requirements for the Areas and Activities of State Interest (AASI) permit (Chapter 6).

RESPONSE: It was agreed during the Conceptual Review Meeting that a Conditional Use Permit application will be submitted for the proposed pipeline.

PLN02: A public hearing before the Planning Commission and Board of County Commissioners (BOCC) is required. The BOCC shall have the final authority to approve or deny the request.

RESPONSE: Noted.

PLN03: A neighborhood/scoping meeting is required prior to submittal of any formal application. A summary of the meeting shall be required in the application. Staff will provide the property owner mailing labels for this meeting. Section 2-01-02 outlines the meeting requirements (time, location, notice, etc.).

RESPONSE: Rocky Mountain Midstream received the neighborhood meeting notice mailing list from Adam's County Planner, Greg Barnes. Meeting notices were mailed by first class postage 15 days prior to the meeting. The purpose of the neighborhood meeting was to provide the community a description of the Project and answer related questions from the attendees. A copy of the notification, neighborhood meeting materials, and a summary of the neighborhood meeting is provided in Exhibit F.

PLN04: Two alternate routes and one preferred will be required as part of any future submittal related to the pipeline. A detailed site plan, drawn to scale, is required for each route. Major roadways, landmarks, structures, bodies of water, etc. shall be identified.

RESPONSE: At this time, the primary route has been submitted for consideration as discussed during the Conceptual Review meeting. Two alternate routes were considered for the Project, but they are the least direct routes. An overview of the primary route and two alternate routes considered for this Project is included as Figure 1.

PLN05: A Development Agreement that outlines the requirements regarding the pre-construction, construction, post-construction, and maintenance requirements of the Project will be required with submittal of any application.

RESPONSE: A copy of the proposed Development Agreement is included with this submittal as Exhibit I.

PLN06: Describe the status of other Federal, State, and local permit requirements (chart form is preferred). If you have obtained these permits, please submit a copy with your application.

RESPONSE: See the table below for all required local permits.

Agency	Permit/Approval/Submittal	Status
Colorado Department of Transportation (CDOT)	Utility Permit	Working on application
Colorado Department of Public Health and Environment (CDPHE)	State Permit COR400000	Working on application
Arapahoe County	USR/1041	Submitted
Arapahoe County	GESC	Submitted
Arapahoe County	Floodplain Permit	Submitted
Bennett-Watkins Fire District	Fire Service Development Application and Emergency Response Plan	Submitted

ROW Review – David Dittmer

ROW1: Any ROW crossing of Adams County roads will need to be properly permitted and reviewed by engineering.

RESPONSE: The proposed pipeline route will not cross any Adams County ROW.

Environmental Analyst Review – Megan Grant

ENV1. Applicant will need to provide current proof of water and sewer details and availability for the project (or indicate that services will not be provided). A description of water and sewer and will-serve letter(s) from the applicable provider(s) regarding proof of water and sewer availability and service for the specific proposed project will be required for Adams County review at time of subsequent permit application(s).

RESPONSE: There are no water or sewer requirements for the Project.

ENV2. Depending on the plan for water and sewer, we may have additional comments that will apply to subsequent permit application(s).

RESPONSE: There are no water or sewer requirements for the Project.

The following comments apply to the airport:

ENV3. Due to the proximity of the subject parcel to Front Range Airport, it is covered by the Airport Noise Overlay (ANO). The portions of the commercial or industrial structures devoted to office uses, or occupied by members of the public, must incorporate noise level reduction measures sufficient to achieve an interior noise level of 45 dB on the A-weighted scale. Assurance that these measures have been incorporated into the structure is illustrated by submission of noise reduction plans certified by a registered professional engineer at the time of application for a building permit and implemented prior to issuance of a Certificate of Occupancy. Please see ACDSR Section 3-39 for more information.

RESPONSE: There will be no post construction noise associated with the Project.

ENV4. In accordance with the ANO, a signed "Aircraft Activity Covenant with Disclosure" must be filed prior to issuance of a building permit.

RESPONSE: There will be no post construction noise associated with the Project.

ENV5. Due to the proximity of the subject parcel to Front Range Airport, it is covered by the Airport Influence Zone (AIZ), which restricts certain residential and commercial developments. See ACDSR Section 3-34 for more information. It is recommended that the applicant contact Colorado Space Port, Front Range Airport, and the FAA regarding proposed development.

RESPONSE: The Watkins Compressor Station facility was fully reviewed and permitted by the FAA during all phases of construction. FAA Letters of Determination are on file, and the pipeline and associated construction will not exceed any of the maximum height restrictions for this location.

ENV6. The subject parcels are located within the Front Range Restriction Area One, which does not allow any structures designed for full or part-time occupation for residential, commercial, institutional, or industrial uses. Refer to ACDSR Section 3-38-05 for details.

RESPONSE: There are no structures associated with the Project.

ENV7. The subject parcel is within the Front Range Restriction Area Two, which prohibits the construction of residences. Refer to ACDSR Section 3-38-05 for details.

RESPONSE: There are no residences associated with the Project.

The following comments apply to approval and permitting:

ENV8. All plans shall be reviewed by the applicable fire district (Bennett-Watkins Fire Rescue) prior to approval. Fire district determination will be required for Adams County review with subsequent permit application(s).

RESPONSE: The Project has been submitted to the Bennett-Watkins Fire District for review.

ENV9. All federal and state regulatory permits, including those required by the United States Pipeline and Hazardous Materials Safety Administration (PHMSA), the Colorado Public Utilities Commission (PUC), and Colorado Energy and Carbon Management Commission (ECMC), as applicable, must be provided to Adams County at the time of conditional use permit application.

RESPONSE: All federal and state regulatory permits shall be provided to the County prior to the start of construction.

ENV10. If the proposed pipeline requires air permits or revisions to existing air permits from Colorado Department of Public Health and Environment (CDPHE), please provide this information with subsequent permit application(s). If the proposed pipeline is exempt from air permitting requirements, please include this documentation as well.

RESPONSE: All CDPHE permits shall be provided to the County prior to the start of construction. Due to the area of disturbance, no air permit is required for the proposed construction.

ENV11. Emergency Response Plan and Spill Response Plan, or other similar documentation, will be provided for Adams County review with subsequent permit application(s).

RESPONSE: An Emergency Response Plan to establish emergency protocols for the pipeline and associated facilities is included with this submittal as part of Exhibit J.

ENV12. Applicant must submit an emergency response plan for referral to the responding Colorado Designated Emergency Response Authority (DERA) for the entire pipeline segment or various responding agencies for the specific jurisdiction in which the pipeline crosses. Please provide documentation to Adams County that this has been completed with subsequent permit application(s).

RESPONSE: The Project has been submitted to the Colorado Designated Emergency Response Authority (DERA), Bennett-Watkins Fire District for review. A copy of the Fire Service Development Application and Emergency Response Plan submitted to the Bennett-Watkins Fire District is included with this submittal as Exhibit K.

ENV13. The applicant/operator shall follow all applicable hazardous materials and waste management regulations to ensure proper management of hazardous materials and waste such that they do not present a significant actual or potential hazard to public health, safety, or environment.

RESPONSE: Noted.

ENV14. All known oil and gas well flow lines and/or easements shall be graphically depicted on the site-specific development plan. In the interest of public health and safety, Adams County recommends that the applicant locate and verify the status of the flowlines. Historic records review, buried utility location, and flowline identification are highly recommended to prevent encountering flowlines during proposed pipeline installation.

RESPONSE: Noted.

The following comments apply to construction and operation:

ENV15. A Nuisance Control Plan or descriptions that address how nuisance hazard impacts, including offsite vehicle tracking, fugitive dust, noise, waste, and lighting will be controlled may be required with subsequent permit application(s).

RESPONSE: Noted.

ENV16. Exposure to air pollution is associated with numerous health problems including asthma, lung cancer, and heart disease. Traffic in unpaved areas may contribute to increased fugitive dust emissions and offsite vehicle tracking. Applicant will be required to implement dust control measures to prevent off-site impacts if truck traffic into and within parcel occurs on non-paved surfaces and during all phases of construction and operation.

RESPONSE: Noted.

ENV17. Regular exposure to elevated sound levels can have a negative impact on both physical and mental health by increasing the risk of stress, hearing impairment, hypertension, ischemic heart disease, and sleep disturbance. Noise attenuation shall comply with the Colorado Noise Statute (CRS 25-12-103) and applicable, local noise regulations. All necessary steps should be taken to mitigate off-site noise.

RESPONSE: Noted.

ENV18. The operator will need to ensure that refuse (trash) is properly controlled and collected as often as necessary to prevent nuisance conditions.

RESPONSE: Noted.

ENV19. Lighting facilities shall be arranged and positioned so no direct light or reflection creates a nuisance or hazard on any adjacent property or right-of-way.

RESPONSE: There is no lighting associated with this project.

ENV20. An inert fill permit must be obtained prior to importing any volume of fill material onto the parcel as part of site development. The permit type will depend on the duration and total volume of fill imported to the site. The fill must meet the definition of clean, inert material.

RESPONSE: Noted.

Development Engineering Review – Fernando Rodriguez

ENG1: According to the Federal Emergency Management Agency's January 20, 2016 Flood Insurance Rate Map (FIRM Panel #08001C0960H), the project site is NOT located within a regulated 100-yr floodplain. A Floodplain Use Permit is NOT required.

RESPONSE: Noted.

ENG2: Property is NOT in Adams County MS4 Stormwater Permit area. A Stormwater Quality (SWQ) Permit is NOT required, but a State Permit COR400000 WILL be required if one (1) acre or more is disturbed. Applicant is responsible for installation and maintenance of Erosion and Sediment Control BMPs. Builder/developer is responsible for adhering to all the regulations of Adams County Ordinance 11 regarding illicit discharge.

RESPONSE: Noted.

ENG3: Applicant must submit Sediment and Erosion Control plans that have been signed and stamped by a Professional Engineer licensed in the state of Colorado. Plans must also include all BMP details. See Small Construction Site Sediment and Erosion Control Guidelines, found at <https://www.adcogov.org/sites/default/files/598.pdf> for more information.

RESPONSE: A Stormwater Management Plan / Erosion Sediment Control Plan is included with this submittal as Exhibit L.

ENG4: If the proposed pipeline will cross I-70, permitting will be required from the Colorado Department of Transportation (CDOT).

RESPONSE: The Project will cross I-70 and a CDOT utility permit shall be obtained prior to the start of construction.

ENG5: If the pipeline will cross any county Right-of-Way such as Manilla Road, an Infrastructure (INF) Permit will be required. All other improvements must be outside of Adams County Right-of-Way. Bored crossings are preferred by the County.

RESPONSE: The Project will not cross any Adams County Right-of-Way.

Neighborhood Services Review - Gail Moon

There are no OPEN violation cases at this location at this time. NO COMMENT.

RESPONSE: Noted.

Exhibit Summary

Exhibit A

Conceptual Review Team Comments

Exhibit B

Alignment Sheets

Exhibit C

Traffic Letter

Exhibit D

Form of Assignment

Exhibit E

Landowner Authorization

Exhibit F

Neighborhood Meeting Summary

Exhibit G

Natural Resources Report

Exhibit H

Cultural Resources Report

Exhibit I

Development Agreement

Exhibit J

Emergency Response Plan

Exhibit K

Bennett-Watkins Fire District Review Application

Exhibit L

Stormwater Management Plan / Erosion Sediment Control Plan

Exhibit A
Conceptual Review PRE2025-00044
Team Comments



Community & Economic Development Department
4430 S. Adams County Pkwy.
1st Floor, Suite W2000B
Brighton, CO 80601
PHONE 720.523.6800
EMAIL epermitcenter@adcogov.org
adcogov.org

Development Review Team Comments

Date: 7/3/2025

Project Number: PRE2025-00044

Project Name: Remora Oil Gathering Pipeline

Commenting Division: Planner Review

Name of Reviewer: Greg Barnes

Date: 07/03/2025

Email: gjbarnes@adcogov.org

Complete

PLN01: A Conditional Use Permit application is required (Section 2-02-09), which shall also address and include all submittal requirements for the Areas and Activities of State Interest (AASI) permit (Chapter 6).

PLN02: A public hearing before the Planning Commission and Board of County Commissioners (BoCC) is required. The BoCC shall have the final authority to approve or deny the request.

PLN03: A neighborhood/scoping meeting is required prior to submittal of any formal application. A summary of the meeting shall be required in the application. Staff will provide the property owner mailing labels for this meeting. Section 2-01-02 outlines the meeting requirements (time, location, notice, etc.).

PLN04: Two alternate routes and one preferred will be required as part of any future submittal related to the pipeline. A detailed site plan, drawn to scale, is required for each route. Major roadways, landmarks, structures, bodies of water, etc. shall be identified.

PLN05: A Development Agreement that outlines the requirements regarding the pre-construction, construction, post-construction, and maintenance requirements of the Project will be required with submittal of any application.

PLN06: Describe the status of other Federal, State, and local permit requirements (chart form is preferred). If you have obtained these permits, please submit a copy with your application.

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica

DISTRICT 1

Kathy Henson

DISTRICT 2

Emma Pinter

DISTRICT 3

Steve O'Dorisio

DISTRICT 4

Lynn Baca

DISTRICT 5

Commenting Division: ROW Review

Name of Reviewer: David Dittmer

Date: 07/03/2025

Email:

Complete

ROW1: Any ROW crossing of Adams County roads will need to be properly permitted and reviewed by engineering.

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica

DISTRICT 1

Kathy Henson

DISTRICT 2

Emma Pinter

DISTRICT 3

Steve O'Dorisio

DISTRICT 4

Lynn Baca

DISTRICT 5

Commenting Division: Environmental Analyst Review

Name of Reviewer: Megan Grant

Date: 07/03/2025

Email:

Complete

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica

DISTRICT 1

Kathy Henson

DISTRICT 2

Emma Pinter

DISTRICT 3

Steve O'Dorisio

DISTRICT 4

Lynn Baca

DISTRICT 5

The following comments apply to water and sewer:

ENV1. Applicant will need to provide current proof of water and sewer details and availability for the project (or indicate that services will not be provided). A description of water and sewer and will-serve letter(s) from the applicable provider(s) regarding proof of water and sewer availability and service for the specific proposed project will be required for Adams County review at time of subsequent permit application(s).

ENV2. Depending on the plan for water and sewer, we may have additional comments that will apply to subsequent permit application(s).

The following comments apply to the airport:

ENV3. Due to the proximity of the subject parcel to Front Range Airport, it is covered by the Airport Noise Overlay (ANO). The portions of the commercial or industrial structures devoted to office uses, or occupied by members of the public, must incorporate noise level reduction measures sufficient to achieve an interior noise level of 45 dB on the A-weighted scale. Assurance that these measures have been incorporated into the structure is illustrated by submission of noise reduction plans certified by a registered professional engineer at the time of application for a building permit, and implemented prior to issuance of a Certificate of Occupancy. Please see ACDSR Section 3-39 for more information.

ENV4. In accordance with the ANO, a signed "Aircraft Activity Covenant with Disclosure" must be filed prior to issuance of a building permit.

ENV5. Due to the proximity of the subject parcel to Front Range Airport, it is covered by the Airport Influence Zone (AIZ), which restricts certain residential and commercial developments. See ACDSR Section 3-34 for more information. It is recommended that the applicant contact Colorado Space Port, Front Range Airport, and the FAA regarding proposed development.

ENV6. This subject parcels are located within the Front Range Restriction Area One, which does not allow any structures designed for full or part-time occupation for residential, commercial, institutional, or industrial uses. Refer to ACDSR Section 3-38-05 for details.

ENV7. The subject parcel is within the Front Range Restriction Area Two, which prohibits the construction of residences. Refer to ACDSR Section 3-38-05 for details.

The following comments apply to approval and permitting:

ENV8. All plans shall be reviewed by the applicable fire district (Bennett-Watkins Fire Rescue) prior to approval. Fire district determination will be required for Adams County review with subsequent permit application(s).

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ENV10. If the proposed pipeline requires air permits or revisions to existing air permits from Colorado Department of Public Health and Environment (CDPHE), please provide this information with subsequent permit application(s). If the proposed pipeline is exempt from air permitting requirements, please include this documentation as well.

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica
DISTRICT 1

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DISTRICT 3

Steve O'Dorisio
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Lynn Baca
DISTRICT 5

ENV11. Emergency Response Plan and Spill Response Plan, or other similar documentation, will be provided for Adams County review with subsequent permit application(s).

ENV12. Applicant must submit an emergency response plan for referral to the responding Colorado Designated Emergency Response Authority (DERA) for the entire pipeline segment or various responding agencies for the specific jurisdiction in which the pipeline crosses. Please provide documentation to Adams County that this has been completed with subsequent permit application(s).

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DISTRICT 1

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DISTRICT 3

Steve O'Dorisio

DISTRICT 4

Lynn Baca

DISTRICT 5

Commenting Division: Environmental Analyst Review

Name of Reviewer: Megan Grant

Date: 07/03/2025

Email:

Comment

ENV13. The applicant/operator shall follow all applicable hazardous materials and waste management regulations to ensure proper management of hazardous materials and waste such that they do not present a significant actual or potential hazard to public health, safety, or environment.

ENV14. All known oil and gas well flow lines and/or easements shall be graphically depicted on the site-specific development plan. In the interest of public health and safety, Adams County recommends that the applicant locate and verify the status of the flowlines. Historic records review, buried utility location, and flowline identification are highly recommended to prevent encountering flowlines during proposed pipeline installation.

The following comments apply to construction and operation:

ENV15. A Nuisance Control Plan or descriptions that address how nuisance hazard impacts, including offsite vehicle tracking, fugitive dust, noise, waste, and lighting will be controlled may be required with subsequent permit application(s).

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ENV18. The operator will need to ensure that refuse (trash) is properly controlled and collected as often as necessary to prevent nuisance conditions.

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ENV20. An inert fill permit must be obtained prior to importing any volume of fill material onto the parcel as part of site development. The permit type will depend on the duration and total volume of fill imported to the site. The fill must meet the definition of clean, inert material.

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica

DISTRICT 1

Kathy Henson

DISTRICT 2

Emma Pinter

DISTRICT 3

Steve O'Dorisio

DISTRICT 4

Lynn Baca

DISTRICT 5

Commenting Division: Development Engineering Review

Name of Reviewer: Fernando Rodriguez

Date: 07/03/2025

Email:

Complete

ENG1: According to the Federal Emergency Management Agency's January 20, 2016 Flood Insurance Rate Map (FIRM Panel #08001C0960H), the project site is NOT located within a regulated 100-yr floodplain. A Floodplain Use Permit is NOT required.

ENG2: Property is NOT in Adams County MS4 Stormwater Permit area. A Stormwater Quality (SWQ) Permit is NOT required, but a State Permit COR400000 WILL be required if one (1) acre or more is disturbed. Applicant is responsible for installation and maintenance of Erosion and Sediment Control BMPs. Builder/developer is responsible for adhering to all the regulations of Adams County Ordinance 11 regarding illicit discharge.

ENG3: Applicant must submit Sediment and Erosion Control plans that have been signed and stamped by a Professional Engineer licensed in the state of Colorado. Plans must also include all BMP details. See Small Construction Site Sediment and Erosion Control Guidelines, found at <https://www.adcogov.org/sites/default/files/598.pdf> for more information.

ENG4: If the proposed pipeline will cross I-70, permitting will be required from the Colorado Department of Transportation (CDOT).

ENG5: If the pipeline will cross any county Right-of-Way such as Manilla Road, an Infrastructure (INF) Permit will be required. All other improvements must be outside of Adams County Right-of-Way. Bored crossings are preferred by the County.

Commenting Division: Neighborhood Services Review

Name of Reviewer: Gail Moon

Date: 06/24/2025

Email: gmoon@adcogov.org

Complete

There are no OPEN violation cases at this location at this time. NO COMMENT

BOARD OF COUNTY COMMISSIONERS

Julie Duran Mullica

DISTRICT 1

Kathy Henson

DISTRICT 2

Emma Pinter

DISTRICT 3

Steve O'Dorisio

DISTRICT 4

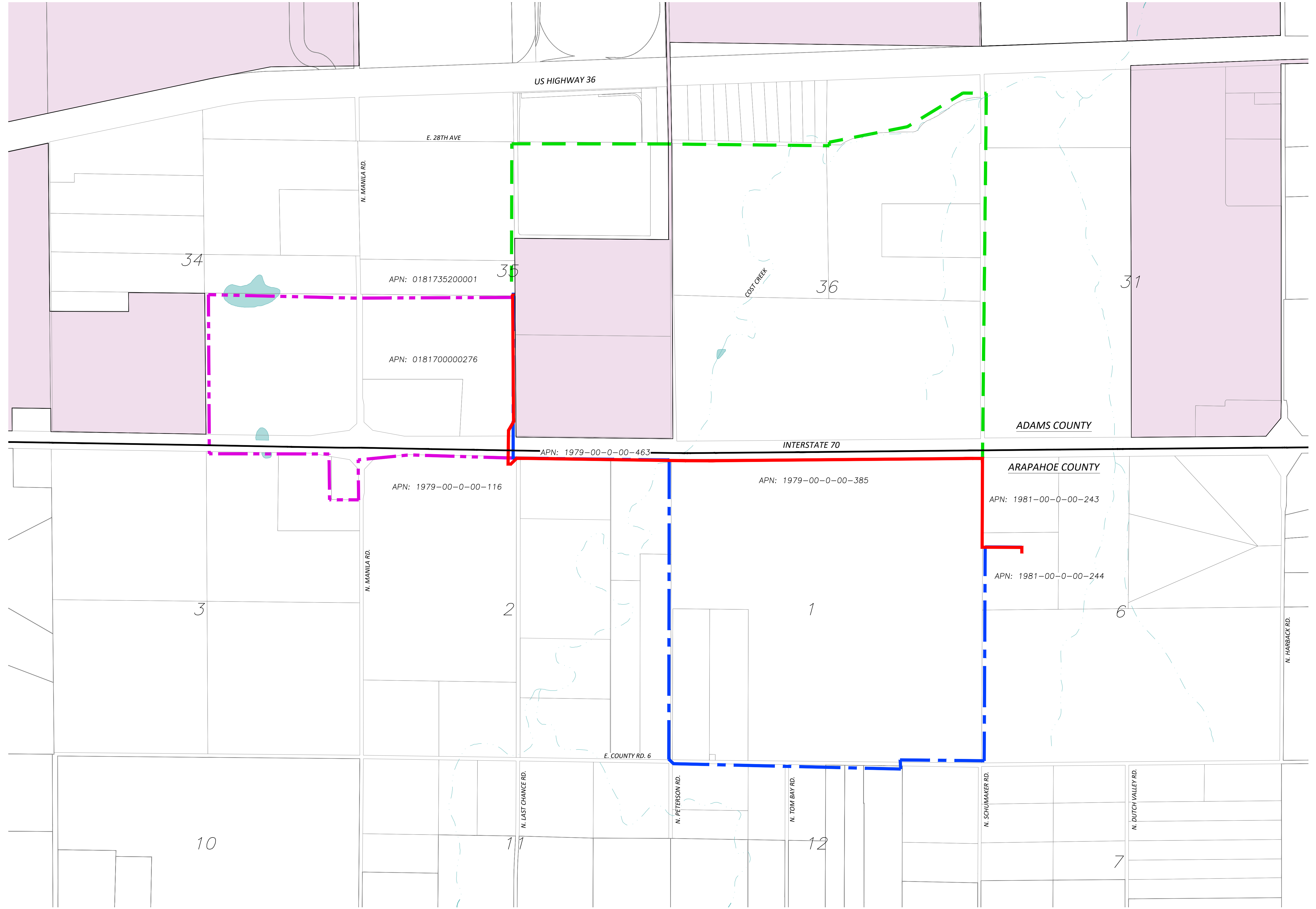
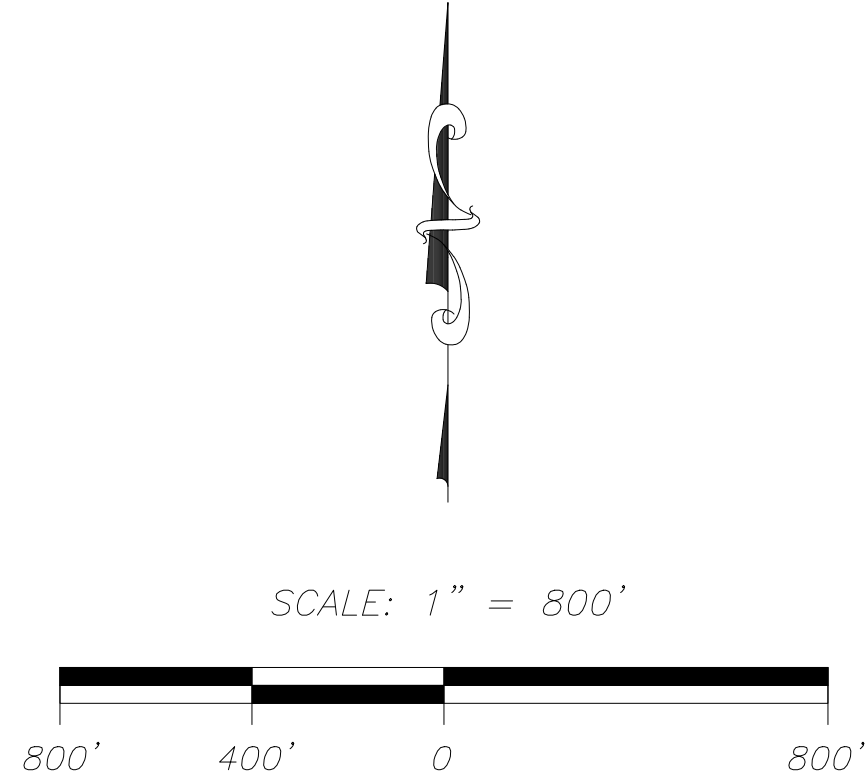
Lynn Baca

DISTRICT 5

Exhibit B
Vicinity Map & Alignments

LEGEND

- MUNICIPAL LIMITS
- PRIMARY ROUTE
- FIRST ALTERNATE ROUTE
- SECOND ALTERNATE ROUTE
- THIRD ALTERNATE ROUTE



REV NO.	A	DRAWN BY:	CHK'D BY:
PERMIT NO.		SRC 10/23/2025	GRS

REMORA CONNECTION
VICINITY MAP
ARAPAHOE COUNTY, COLORADO



ADAMS COUNTY, COLORADO																																																						
COUNTY & STATE																																																						
TERRAIN & SOIL																																																						
LAND USE																																																						
PARCEL No. OWNERSHIP SURVEY FEET/RODS		0+00		4+10		30+93																																																
		REM-010.0 ROCKY MOUNTAIN MIDSTREAM, LLC SEC. 35, T 3 S - R 64 W, 6TH P.M. 409.6' OR 24.8 RODS				REM-009.0 LEWIS FAMILY TRUST SEC. 35, T 3 S - R 64 W, 6TH P.M. 2683.2' OR 162.6 RODS																																																
STATIONING		0+00.0 BEGIN LINE 1+08.7 PAD EDGE 1+23.5 DITCH TOE 1+41.8 TOP OF BANK 1+44.8 FENCE 1+48.8 TOP OF SLOPE 1+62.9 P.I. <90°00'00" RT. 3+50.7 TOE OF SLOPE 3+64.4 EDGE OF ROAD 3+71.4 CENTER OF ACCESS ROAD 3+76.3 ELEVATION STEEL PIPELINE 3+78.4 EDGE OF ROAD 3+90.2 TOE OF SLOPE 4+09.6 PARCEL LINE 4+22.9 DISCOVERY STEEL PIPELINE 4+35.5 P.I. <21°39'20" LT. 4+74.3 P.I. <22°32'37" RT. 5+50.6 FENCE 5+51.1 FENCE 5+84.4 FENCE 7+27.6 FENCE 8+97.3 FENCE 10+19.1 FENCE 11+71.9 FENCE 12+93.2 FENCE 14+15.2 FENCE 15+49.0 FENCE 16+65.1 FENCE 17+70.1 FENCE 18+69.9 FENCE 19+62.2 FENCE 20+65.1 FENCE 21+51.2 FENCE 22+55.7 FENCE 23+46.4 FENCE 24+41.1 FENCE 25+22.3 FENCE 25+60.9 P.I. <30°44'59" RT. 27+31.9 P.I. <29°36'25" LT. 27+47.2 BORE ENTRY 28+78.5 FENCE 29+30.4 TOE OF SLOPE 29+60.5 TOP OF SLOPE 29+63.5 EDGE OF ROAD 29+73.6 EDGE OF SHOULDER 29+85.6 CENTER OF INTERSTATE 70 WEST 29+97.8 EDGE OF SHOULDER 30+01.6 EDGE OF ROAD 30+03.1 TOP OF SLOPE 30+15.2 TOP OF SLOPE 30+40.5 TOE OF SLOPE 30+52.7 TOP OF SLOPE 30+53.3 EDGE OF ROAD 30+57.1 EDGE OF SHOULDER 30+70.9 CENTER OF INTERSTATE 70 EAST 30+86.8 EDGE OF SHOULDER 30+91.6 EDGE OF ROAD 30+92.8 SECTION LINE																																																				
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PROFILE HORIZONTAL: 1"=200' VERTICAL: 1"=20'																																																						
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22	OH POWER LINE																																																					
3	FENCE GAPS																																																					
	ROADS																																																					
No.	DESCRIPTION	DATE																																																				
No.	DEFLECTION																																																					
2	IRREGULAR																																																					
	15'																																																					
2	30'																																																					
	45'																																																					
1	90'																																																					
TOTAL	5																																																					

Exhibit C
Traffic Letter

Remora Oil and Gas Pipeline Traffic Control Plan

Adams County and Arapahoe County

Companies: DJ South Gathering LLC & Rocky Mountain Midstream LLC

Date: November 6, 2025

Revision: 1 – Second Draft

1. Introduction

This Traffic Control Plan (TCP) has been developed for the Remora Oil and Gas Pipeline Project, located within Adams County and Arapahoe County, Colorado. The purpose of this plan is to outline traffic management procedures, routes, and controls necessary to minimize disruptions to public traffic, ensure the safety of the traveling public and construction personnel, and comply with applicable state, county, and municipal requirements.

2. Project Overview

The Remora Oil and Gas Pipeline Project involves the construction of up to an 8" oil and 10" gas pipeline infrastructure by DJ South Gathering LLC and Rocky Mountain Midstream LLC. Construction activities will take place over an estimated 2-month period and will include material deliveries, equipment mobilization, daily construction commuting and on-site installation work.

3. Construction Traffic Plan

The construction contractor will utilize state highways and paved roads where possible, as these are typically designed to accommodate larger vehicles. All necessary overweight or oversized permits will be obtained prior to mobilization.

3.1 Construction Period and Vehicle Activity

During the construction period (approximately 2 months), semi-trucks transporting equipment, materials, and supplies will enter and exit the project site using a temporary construction access. Initial mobilization will involve 2-4 trucks delivering civil equipment to the Remora Well Pad site via Manilla Rd south to East County Rd 6 to the pad site access road located in Arapahoe County as well as via Manilla Road north to the Rocky Mountain Midstream Watkins Compressor Station access road in Adams County. These will be demobilized approximately 60 days after initial mobilization. Mid-July there will be 8-10 pipeline delivery trucks over the span of 1-2 weeks to deliver all the pipeline to the ROW. Afterward deliveries will primarily consist of occasional hot shot trucks for smaller equipment and materials until the end of construction. Trucks will be required to enter the site fully, unload within the right-of-way temporary workspace area, and exit within their allotted time window. The ROW area can accommodate 1–2 waiting trucks if needed.

3.2 Traffic Routes

Coming from the West on I-70 to Pipeline Start

Construction traffic will exit I-70, proceed south on Manilla Rd, then East on East 6th Avenue till the access road just North of N Schumaker Rd.

Coming from the East on I-70 to Pipeline Start

Construction traffic will exit I-70, proceed south on Converse Road, then West on I-70 Frontage Road, then West on East 6th Avenue, till the access road just North of N Schumaker Rd.

Coming from the West or East on I-70 to Pipeline End

Construction traffic will exit I-70, proceed North on Manilla Rd, then East Rocky Mountain Midstream's access road to their compressor station.

3.3 Manpower and Parking

During construction, the project will average approximately 20 personnel onsite, with a peak of up to 40 workers during the summer of 2026 for an estimated 6 weeks. All worker parking will be provided within the ROW & temp workspace accessed via the same construction entrance(s).

3.4 Trucking and Weight Limits

Truck loads will comply with CDOT requirements for axle weight and vehicle size. Equipment will be transported into and out of the site as needed, ensuring compliance with all applicable permitting and routing requirements.

4. Post-Construction Traffic

Upon completion of construction, site traffic will be minimal. Routine maintenance and inspection visits will occur weekly with 1-2 operators in technician vehicles entering and exiting the necessary sites via the Remora Pad access road or existing Watkins Compressor Station access. All operations and maintenance activities will be performed by trained and qualified personnel.

5. Safety and Compliance

All construction traffic control measures will comply with applicable CDOT, Adams County, and Arapahoe County standards, including the Manual on Uniform Traffic Control Devices (MUTCD). Temporary traffic control devices, flaggers, and signage will be implemented as required to ensure the safety of the public and workers.

Exhibit D
Form of Assignment

ASSIGNMENT OF EASEMENT INTERESTS

THIS ASSIGNMENT OF EASEMENT INTERESTS (the "Assignment") from **DJ South Gathering, LLC**, a Colorado limited liability company, whose address is 1200 17TH Street, Suite 750, Denver, CO. 80202 ("Assignor"), to **Rocky Mountain Midstream, LLC**, a Texas limited liability company, whose address is One Williams Center, Tulsa, Oklahoma 74172, (the "Assignee"), is executed to be effective as of [] (the "Effective Date"). Each of the Assignor and Assignee may be referred to in the singular sense as a "Party" or collectively as the "Parties."

For and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor hereby GRANTS, BARGAINS, SELLS, CONVEYS, ASSIGNS, TRANSFERS AND DELIVERS unto Assignee and its successors and assigns forever, with covenants of special warranty, Grantor's right, title and interest in the easements and rights-of-way (collectively, the "Easements") described on Exhibit "A," INsofar AND ONLY INsofar as such Easements pertain to the interest described in the "Interest Being Assigned" column on Exhibit "A" attached hereto and incorporated herein.

EXCEPTING AND RESERVING to Assignor, however, all other permits, easements, contracts, rights of way, and properties of Assignor not specifically described as the "Interest Being Assigned" upon Exhibit "A".

TO HAVE AND TO HOLD the Easements unto Assignee, its successors and assigns, forever, subject to the following terms and conditions:

Special Warranty of Title. ASSIGNOR AGREES TO WARRANT AND FOREVER DEFEND TITLE TO THE EASEMENTS UNTO ASSIGNEE AGAINST THE CLAIMS AND DEMANDS OF ALL PERSONS CLAIMING, OR TO CLAIM THE SAME, OR ANY PART THEREOF, BY, THROUGH, OR UNDER ASSIGNOR, BUT NOT OTHERWISE.

Further Assurances. On and after the Effective Date, the Parties shall, without further consideration, execute, deliver and if applicable file or record, or cause to be executed, delivered and filed or recorded, all instruments, and take such actions as may be reasonably required of the Parties to accomplish the conveyance and transfer of the Easements, and shall send all required notices with respect to the Easements.

Successors and Assigns. This Assignment shall bind and inure to the benefit of the Parties and their respective successors and assigns.

Governing Law. This Assignment shall be construed in accordance with, and governed by, the laws of the State of Colorado without regard to principles of conflicts of law.

Amendment and Termination. This Assignment may only be modified, amended, changed, discharged or terminated by an agreement in writing signed by the Party against whom the enforcement of the modification, amendment, change, discharge or termination is sought.

Severability. If any provision of this Assignment shall be held invalid or unenforceable by any court of competent jurisdiction, the remainder of this Assignment shall not be affected thereby and each other term, covenant, condition, and provision shall be valid and enforceable to the fullest extent permitted by law.

Counterparts. This Assignment may be executed in counterparts, and each counterpart shall be deemed to be an original instrument, but all counterparts shall constitute but one instrument.

Cooperation. The Parties shall use commercially reasonable efforts to cooperate with each other in the exercise of their rights and obligations under the Easements in a manner that minimizes any impact on each other's operations, activities, or other uses of the Easements. Except in the event of an emergency, prior to initiating any construction, maintenance, repair, inspection, removal, or activity on the Easements that materially disturbs the surface, involves digging, or requires boring, the Parties shall give each other reasonable advance notice of such activities.

[Remainder of page left intentionally blank. Signature page follows.]

IN WITNESS WHEREOF, this Assignment shall be effective between the Assignor and Assignee as of the Effective Date but has been executed by the Parties as of the date set forth in the acknowledgments.

ASSIGNOR:

DJ SOUTH GATHERING, LLC

By: _____
Name:
Title:

ASSIGNEE:

ROCKY MOUNTAIN MIDSTREAM, LLC

By: _____
Name: Cory Crawford
Title: Manager-Land

ACKNOWLEDGMENTS

STATE OF OKLAHOMA §
 §
COUNTY OF TULSA §

The foregoing **ASSIGNMENT OF EASEMENT INTERESTS** was acknowledged before me on the ___ day of _____, _____, by Cory Crawford in his capacity as Manager-Land and Attorney-in-Fact of Rocky Mountain Midstream, LLC.

Notary Public

My commission expires: _____

STATE OF COLORADO

§
§
§

CITY AND COUNTY OF DENVER

The foregoing **ASSIGNMENT OF EASEMENT INTERESTS** was acknowledged before me on the _____ day of _____, _____, by _____, in their capacity as _____ of DJ South Gathering, LLC.

Notary Public

My commission expires: _____

Exhibit E
Landowner Authorization

LETTER OF AUTHORIZATION

October 29, 2025

Adams County Colorado
Planning Division
4430 South Adams County Parkway
Brighton, CO. 80601

I am writing to let you know that we, David Mason Lewis and Deanna Lynne Lewis, as Co-Trustees of s , The Lewis Family Trust, U/A Dated October 29, 2019 have granted a Non-Exclusive Right of Way on Adams County Parcel # 0181710000276, a true and correct copy of which is recorded at Instrument Number 2025000063159, of the official public records of Adams County Colorado. I hereby authorize DJ South Gathering, LLC, Rocky Mountain Midstream, LLC, CR Land Services, LLC, and Marin Field Services, LLC to prepare and sign application materials and otherwise represent the owner of the Right of Way on Parcel #0181710000276 regarding the Adams County Conditional Use Permit Application for the Remora Pipeline Project located on Parcel # 181710000276. This Authorization is limited to the submission of materials for the above referenced land development project and associated permits, and subject to the terms and conditions of the Right of Way recorded at Instrument Number 2025000063159 of the official public records of Arapahoe County Colorado.

By: David Mason Lewis Date: 11/03/25
David Mason Lewis, Co-Trustee of The Lewis Family Trust, U/A Dated October 29, 2019

By: Deanna Lynne Lewis Date: 11/3/25
Deanna Lynne Lewis, Co-Trustee of The Lewis Family Trust, U/A Dated October 29, 2019

State of Texas)
County of Erath) ss.

Before me, the undersigned notary public, in and for said state, personally appeared, David Mason Lewis, and Deanna Lynne Lewis Co-Trustee of The Lewis Family Trust, U/A Dated October 29, 2019.

Witness my hand and official seal:

My Commission Expires: 10-27-2028

Janette Goodman
Notary Public Signature

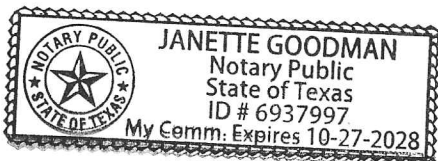


Exhibit F
Neighborhood Meeting Summary

**Remora Pipeline Project
Adams County & Arapahoe County Stakeholders
Neighborhood Meeting Summary
Adams County Case Number: PRE2025-00044
Arapahoe County Case Number: Q25-060**

**Meeting Details:
Saturday, November 1, 2025
8:00 AM - 11:00 AM
Colorado Air and Space Port
5200 Front Range Pkwy, Watkins, CO**

A joint neighborhood meeting was held by DJ South Gathering, LLC and Rocky Mountain Midstream, LLC on Saturday, November 1, 2025, at the Colorado Air and Space Port in Watkins, CO

Invitations were mailed on October 14, 2025, to mailing lists generated with a 500-foot buffer of the primary and alternate routes. Mailing lists for both Adams County and Arapahoe County were approved by the respective County Planners.

Meeting notification signs were placed on Manilla Rd. and County Rd. 6, south of I-70 in Arapahoe County, on October 15, 2025. The signs were removed on November 3, 2025.

Available during the meeting was a rolling PowerPoint presentation providing company and project information, as well as two 24x36 printed vicinity maps showing the primary route, and 3 alternate routes which were considered.

A total of 6 attendees, all from properties located within Adams County, attended the meeting. In addition, the Arapahoe County Planner, Martin Lohmann, attended. A copy of the sign-in sheet is included with this submittal.

Following is a summary of the questions asked during the meeting, along with responses given.

Question: Will pipeline go north or south of I-70.

Response: The pipeline starting point will be at the Remora Pad which is located on the south side of I-70, and east of Schumacker Rd. It will continue west within private easements on the south side of I-70. The pipeline will cross I-70 to the north side of I-70, east of Manilla Rd. to the Watkins Compressor Station located on the east side of Manilla Rd.

Question: Will there be any impact to the RV Storage property?

Response: No. The RV Storage property is located on the west side of Manilla Rd. The pipeline will remain on the east side of Manilla Rd.

Question: What will the impact be to county roads.

Response: While the pipeline crosses Arapahoe County right-of-way, there will be no impact to existing county roads. The pipeline will cross Highway I-70 and construction will be by direction bore with no surface impact to the highway.

Question: Is this related to the large diameter pipeline for the power generation station near Bennett, CO?

Response: No, this is not related to that project.

Question: Why is the County pro-oil and gas?

Response by Arapahoe County Planner Martin Lohmann: Tax revenue.

Question: How soon do you reseed after construction?

Response: Depending on timing of construction, which is currently mid-summer, we will wait to put seed down either in the fall or spring. Reclamation requirements are determined on a landowner case-by-case basis per the agreements secured with individual landowners.

Comment: Concerns with the possible alternate route that was explored in Adams County which runs parallel to Schumaker Rd. and crosses Schumaker Rd.

- Possible additional truck traffic and damage to Schumaker Rd.
- Concern for possible damage of bridge on Schumaker Rd.
- Concern for lowlands / wetlands.
- Support of shortest, proposed primary route.

Response: We have been actively working with landowners to secure the required agreements on the proposed primary route. The County typically supports the more direct, shortest route possible, barring any possible negative impacts to environment and infrastructure.

**Remora Pipeline Project
Adams County & Arapahoe County Stakeholders
Neighborhood Meeting Notice**

Details

Saturday, November 1, 2025
8:00 AM - 11:00 AM

Colorado Air and Space Port
Terminal Building
5200 Front Range Pkwy, Watkins, CO
** Last building on Front Range Pkwy.
** Look for CO Air & Space Port logo on the building

Purpose

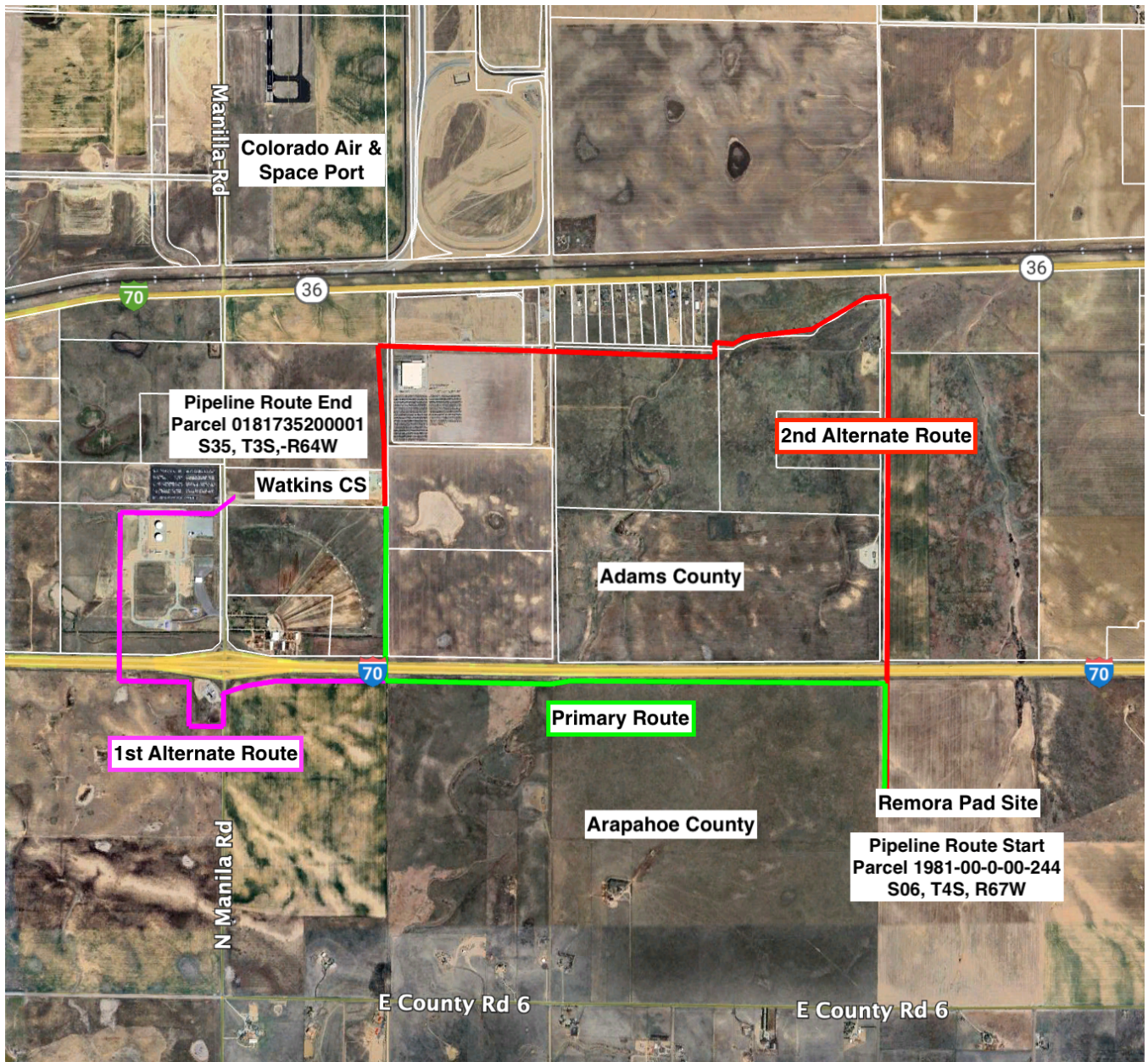
DJ South Gathering LLC, a subsidiary of Elevation Midstream LLC and Rocky Mountain Midstream LLC, a subsidiary of Williams Companies Inc., are holding an informational meeting for the community to discuss the Remora Pipeline Project. The route for the proposed 6-inch crude oil pipeline and the proposed 10-inch natural gas pipeline will commence at the Remora Well Pad site located on Parcel 1981-00-0-00-244, S06, T4S, R67W, in Arapahoe County and continue in a north-westerly direction to the Rocky the Mountain Midstream Compressor Station located on Parcel 0181735200001, , 2150 Manilla Rd.in Adams County.

DJ South Gathering, LLC and Rocky Mountain Midstream, LLC are holding this meeting to inform neighbors and landowners and to seek their input prior to submitting permit applications with Adams County and Arapahoe County. This will be an Open House style meeting with experts from different groups across the project. We hope you can join us to provide input before we submit our applications. Construction is expected to begin during the first quarter of 2026.

Contact Information

If you have questions or need any information before the meeting, please feel free to contact:

Janice Kinnin
janicekinnin@outlook.com



ADAMS COUNTY
4430 S ADAMS COUNTY PKWY STE C5000A
BRIGHTON CO 80601-8204

PORT COLORADO INDUSTRIAL HOLDINGS LLC
1331 17TH ST STE 1000
DENVER CO 80202-1566

CARDIN DONALD DWAYNE AND
CARDIN TABITHA ANN
699 S NUTMEG ST
BENNETT CO 80102-8771

RAIL LAND COMPANY LLC
6200 S SYRACUSE WAY STE 450
GREENWOOD VILLAGE CO 80111-4737

CRESTONE PEAK RESOURCES WATKINS MIDSTREAM LLC
555 17TH ST STE 3700
DENVER CO 80202-3906

ROCKY MOUNTAIN MIDSTREAM LLC
1 ONE WILLIAMS CTR
TULSA OK 74172-0140

FRONT RANGE 1-70 CAPITAL ASSETS LLC
C/O JEFFREY SMITH
500 106TH AVE NE UNIT 3815
BELLEVUE WA 98004-8694

ROCKY MOUNTAIN MIDSTREAM LLC
C/O AD VALOREM TAX
1 ONE WILLIAMS CTR
TULSA OK 74172-0140

FRONT RANGE RV STORAGE LLC
6159 S KINCAID ST
BENNETT CO 80102-8304

ROCKY MOUNTAIN RAIL PARK METROPOLITAN DISTRI
CT
8390 E CRESCENT PKWY STE 300
GREENWOOD VILLAGE CO 80111-2813

GREER CAMERON AND
GREER JORDAN
6229 S JAMESTOWN CT
AURORA CO 80016-6165

ROCKY MOUNTAIN RAIL PARK METROPOLITAN DISTRI
CT
C/O SPENCER FANE LLP
170 LINCOLN ST STE 2000
DENVER CO 80203

HAUET WILLIAM A AND
HAUET VALERIE A
41420 HIWAY 36
BENNETT CO 80102

ROCKY MOUNTAIN RAIL PARK METROPOLITAN DISTRI
CT
C/O SPENCER FANE LLP
100 N LINCOLN ST STE 2000
DENVER CO 80203-3965

LKQ CENTRAL INC
5846 CROSSINGS BLVD
ANTIOCH TN 37013-3129

SAADATKHAH HAMID
2424 E 40TH AVE
DENVER CO 80205-3522

LUBERSKI PROPERTIES LLC
310 N HARBOR BLVD STE 205
FULLERTON CA 92832-1954

SIEGMAN THOMAS AND PATRICIA TRUST
475 3RD ST
BENNETT CO 80102-8109

PINEDO MARCELINO AND
PINEDO BELINDA
41220 E HIGHWAY 36
BENNETT CO 80102

STOKER KENT E AND
STOKER BRENT A
41340 E HIWAY 36
BENNETT CO 80102

TEAGUE ELSBETH L TRUST
6493 W LAKESIDE CT
LITTLETON CO 80125-9621

SIEGMAN DAVID W
OR CURRENT RESIDENT
2495 SCHUMAKER ROAD
BENNETT CO 80102

THE LEWIS FAMILY TRUST
24313 N FM 219
STEPHENVILLE TX 76401-9161

VANDOORN DAVID D
OR CURRENT RESIDENT
41540 US HIGHWAY 36
BENNETT CO 80102-7858

WALTERS ANTHONY L AND
WALTERS KELLY P
41280 E HIWAY 36
BENNETT CO 80102

ZUHLKE JR RONALD L AND
ZUHLKE HEIDI L
OR CURRENT RESIDENT
41660 US HIGHWAY 36
BENNETT CO 80102-7859

WESTERN TRANSPORT LLC
1331 17TH ST STE 1000
DENVER CO 80202-1566

CURRENT RESIDENT
41220 US HIGHWAY 36
BENNETT CO 80102-7800

ZUHLKE RONALD L JR AND
ZUHLKE HEIDI
41660 US HIGHWAY 36
BENNETT CO 80102-7859

CURRENT RESIDENT
41280 US HIGHWAY 36
BENNETT CO 80102-7800

DOMINGUEZ HERIBERTO ROBLES AND
MADERA RAISSA
OR CURRENT RESIDENT
2625 N PETERSON RD
BENNETT CO 80102-8813

CURRENT RESIDENT
41340 US HIGHWAY 36
BENNETT CO 80102-7857

HERNANDEZ-MOJICA JANETH
OR CURRENT RESIDENT
41070 US HIGHWAY 36
BENNETT CO 80102-8626

CURRENT RESIDENT
41420 US HIGHWAY 36
BENNETT CO 80102-7857

JONES BOBBIE J AND
FLOYD EDDIE ALLAN JR
OR CURRENT RESIDENT
41020 US HIGHWAY 36
BENNETT CO 80102-8626

CURRENT RESIDENT
41460 US HIGHWAY 36
BENNETT CO 80102-7857

MORELOCK KENNETH M AND
MORELOCK EVA RAYNETTE
OR CURRENT RESIDENT
41140 US HIGHWAY 36
BENNETT CO 80102-7800

CURRENT RESIDENT
41620 US HIGHWAY 36
BENNETT CO 80102-7859

REMINGTON S A
OR CURRENT RESIDENT
40940 US HIGHWAY 36
BENNETT CO 80102-8626

CURRENT RESIDENT
2575 N PETERSON RD
BENNETT CO 80102-8822

CURRENT RESIDENT
1614 N MANILA RD
BENNETT CO 80102-8868

CURRENT RESIDENT
1616 N MANILA RD
BENNETT CO 80102-8868

CURRENT RESIDENT
1631 N MANILA RD
BENNETT CO 80102-8868

CURRENT RESIDENT
2121 N MANILA RD
BENNETT CO 80102-8868

CURRENT RESIDENT
2575 N MANILA RD
BENNETT CO 80102-8868

DJ South Gathering, LLC & Rocky Mountain Midstream, LLC

Remora Pipeline Project

Adams County Case No. PRE2025-00044

Arapahoe County Case No. Q25-060

Neighborhood Outreach – Sign-In Sheet

Saturday, November 1, 2025

Name	Address	City/State/Zip	Phone	Email
Hariz Troxel	6493 W. Lakeside Ct	Littton CO 80125	303 324-5772	BLT5507@msr.com
Hamid Gaudet	2424 E 40th Ave Denver CO 80205		303 901-9844	BestAutosales.co@gmail.com
Ahmad Soufian	1934 W. 131 st Dr. Westminster, CO 80234		303-880-5382	soufiant@gmail.com
Farid Gayot	28 Yuccahills castle Rock 80109		720-727-1200	Farid@Renaissance.com
MARTIN LOARMON	6924 S. Limbo	Cent CO 80011	720-874-6750	MLOARMON@arapahoe.com

DJ South Gathering, LLC & Rocky Mountain Midstream, LLC

Remora Pipeline Project

Adams County Case No. PRE2025-00044

Arapahoe County Case No. Q25-060

Neighborhood Outreach – Sign-In Sheet

Saturday, November 1, 2025

Name	Address	City/State/Zip	Phone	Email
DAVID SIEGMAN	2495 SCHUMAKER RD	Bennett, CO 80102		
JEFF HOPKINS	2124 N. MARICA RD.	BENNETT		



WE MAKE CLEAN ENERGY HAPPEN®



Remora Pipeline Project



November 1, 2025

Who We Are

DJ South Gathering, LLC
is a subsidiary of



Elevation Midstream, LLC

Rocky Mountain Midstream, LLC
is a subsidiary of



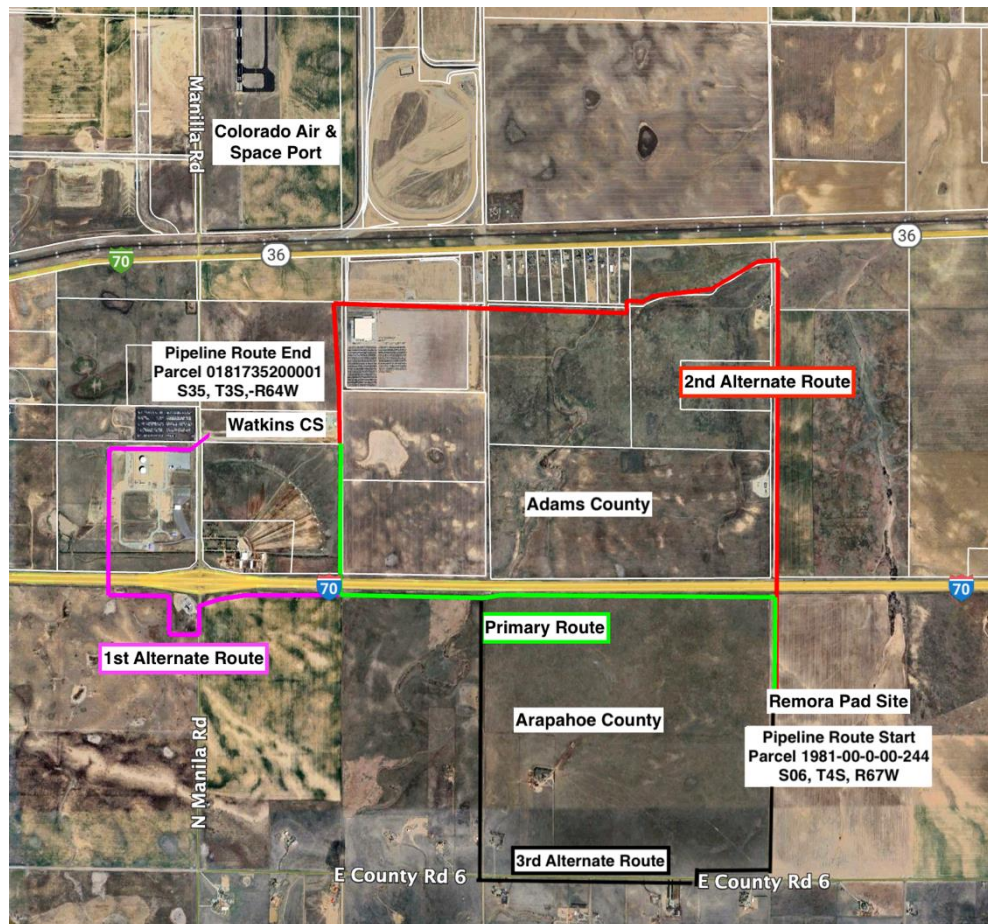
Williams Companies, Inc.

Project Overview

- DJ South Gathering, LLC – (1) up to 8-inch crude oil pipeline.
- Rocky Mountain Midstream, LLC – (1) up to 12-inch natural gas pipeline.
- Start of pipeline route: Remora Pad Site, Arapahoe County
 - located north of CR 6 at Schumaker Rd.
- End of pipeline route: Watkins Compressor Station, Adams County
 - located north of I-70 at Manilla Rd.
- Rocky Mountain Midstream, LLC – Possible 3rd pipeline from Watkins Compressor Station (north of I-70) to Remora Pad Site (south of I-70).
- Approximately 2.5 miles of underground pipeline constructed in joint, private landowner easements.
- All pipelines will be 100% underground except for beginning and end locations.

Pipeline Route

- The proposed pipeline route is located on private landowner easements in Arapahoe County and Adams County. It is shown by the green line on the map below.
- The most direct / shortest route has been selected as the proposed route.
- Alternate routes that were considered are longer in distance, closer to residential areas, and cross more roads.



Land Use Permitting Considerations

Adams County

- Conditional Use Permit (CUP) required from Adams County
- CUP is overarching permit that the other land development permits roll up under (ROW, grading, etc.)
- CUP approval anticipated 6 months after submittal
- Permit approval required prior to earthwork beginning.

Arapahoe County

- Use by Special Reivew (USR), 1041, and Grading, Erosion, and Sediment Control (GESC) required by Arapahoe County.
- USR, 1041, GESC are overarching permits that the other land development permits roll up under (Access, ROW, Floodplain, etc.).
- USR/1041/GESC approval anticipated 6 months after submittal.
- Permit approval required prior to earthwork beginning.

Colorado Department of Transportation (CDOT)

- Utility permit for I-70 bore.
- Permit approval required prior to I-70 bore.

Environmental Permitting Considerations

- The Project is in an area that includes existing agriculture, oil and gas development, urban development, and transportation infrastructure (i.e. roads).
- During the field survey, SWCA Environmental Consultants confirmed that the project area does not overlap with any designated critical habitat for federally-listed species.
- Project impacts will be temporary, and right-of-way will be fully restored to pre-existing conditions.
- Project will be permitted and comply with all state and local stormwater regulations.

Pipeline Project Standards

- Compliance with Colorado Energy and Carbon Management Commission 1100 regulations.
- Compliance with the Adams County CUP and Development Agreement requirements.
- Compliance with the Arapahoe County USR / 1041 / GESC and License Agreement requirements.
- Utilize the following best management practices on the pipeline in addition to the above cited codes and regulations:
 - Construction limited to 7 am to 7 pm Monday – Saturday
 - Stormwater Management per an established Stormwater Management Plan (SWMP).
 - Erosion and Sediment Control per an established Erosion and Sediment Control Plan.
 - Minimum 4' of cover on all buried lines
 - Construction of HDPE and Stainless Steel for superior corrosion resistance

Timing of Construction

Assuming the necessary permits are obtained:

- Start construction in Q2 2026 at the Remora Pad site in Arapahoe County.
- Completion of construction in Q3 2026 at the Watkins Compressor Station in Adams County.

Partner with the Communities



DJ South Gathering and Rocky Mountain Midstream
commit to being proactive partner with the
Communities and Counties through the duration of
this project



Close coordination with the Bennett-
Watkins Fire District

We are committed to collaborating with local governments and communities to ensure
an accountable and responsive working relationship that is environmentally conscious
and prioritize safety overall.

LEGEND

MUNICIPAL LIMITS

PRIMARY ROUTE

FIRST ALTERNATE ROUTE

SECOND ALTERNATE ROUTE

THIRD ALTERNATE ROUTE

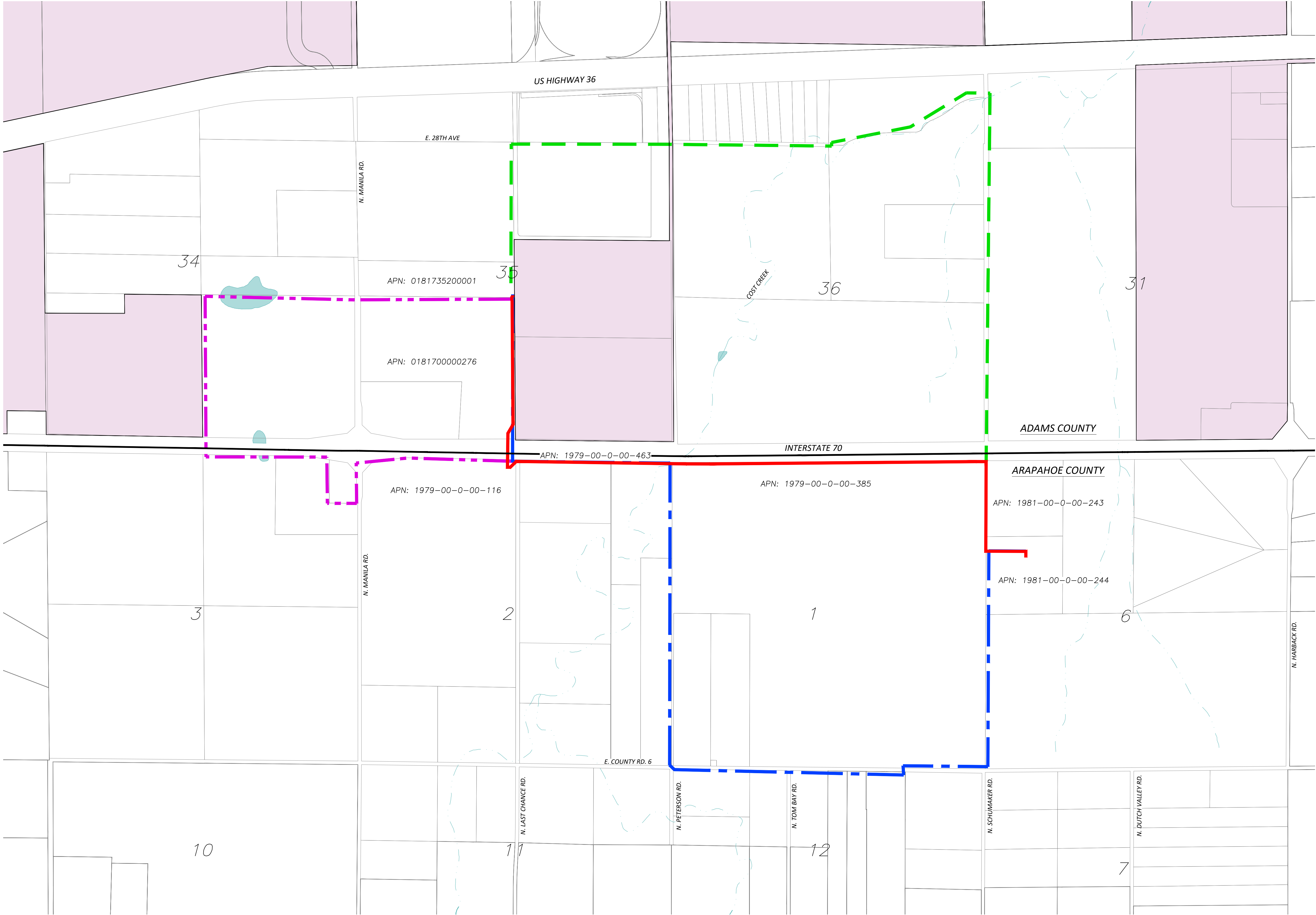
800'

400'

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800'

SCALE: 1" = 800'



REV NO.	A	DRAWN BY:	CHK'D BY:
PERMIT NO.		SRC 10/23/2025	GRS

REMORA CONNECTION

VICINITY MAP

ARAPAHOE COUNTY, COLORADO



Avery

LAND SERVICES


N

S

Avery Land Services, LLC

1321 W. Main St. #522 • Sterling, CO 80751

Exhibit G
Natural Resources Report

The logo for the South Western Consulting Association (SWCA) is positioned vertically on the left side of the page. It consists of the letters 'S', 'W', 'C', and 'A' in a large, stylized, light blue font, stacked one above the other.

Natural Resources Survey Report for the Remora Well Connection Crude Oil Pipeline Project, Adams and Arapahoe Counties, Colorado

NOVEMBER 2025

PREPARED FOR

DJ South Gathering, LLC

PREPARED BY

SWCA Environmental Consultants

NATURAL RESOURCES SURVEY REPORT FOR THE REMORA WELL CONNECTION CRUDE OIL PIPELINE PROJECT, ADAMS AND ARAPHOE COUNTIES, COLORADO

Prepared for

DJ South Gathering, LLC
1200 17th Street #750
Denver, Colorado 80202

Prepared by

SWCA Environmental Consultants
295 Interlocken Boulevard, Suite 300
Broomfield, Colorado 80021
(303) 487-1183
www.swca.com

SWCA Project No. 100338-001

November 2025

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1 INTRODUCTION

DJ South Gathering, LLC (DJ South Gathering), is proposing to construct the Remora Well Connection Pipeline Project (Project) in Adams and Arapahoe Counties, Colorado. On behalf of DJ South Gathering, SWCA Environmental Consultants (SWCA) completed a natural resources desktop analysis and field survey to assess potential impacts to sensitive natural resources, including aquatic resources and special-status species, and to assess Project compliance with Section 404 of the Clean Water Act (CWA); Colorado Department of Public Health and Environment (CDPHE) regulation, Discharges of Dredged and Fill Material into State Waters under House Bill 24-1379; the Endangered Species Act (ESA); the Migratory Bird Treaty Act (MBTA); the Bald and Golden Eagle Protection Act as amended; and Colorado Revised Statute 33-2-105, which provides protections for state-listed threatened and endangered species.

The Project consists of an approximately 2.6-mile-long, up to 8-inch diameter carbon steel crude oil pipeline and associated appurtenances that will connect the Remora well pad to the Williams Watkins Compressor Station (Figure A-1 in Appendix A). The Project will parallel a natural gas pipeline that will be installed by Rocky Mountain Midstream, LLC, a subsidiary of Williams Companies, Inc. The Project is entirely on privately owned land, with construction scheduled to begin in the second or third quarter of 2026. The Project pipeline limits of disturbance may include portions of a 9.21-acre permanent easement, a 9.63-acre temporary workspace, and a 2.02-acre additional temporary workspace. The Project will use horizontal directional drilling to bore under Interstate 70 (I-70), as well as two parcels located south of I-70. The total bore length is approximately 3,385 feet. SWCA evaluated a 150-foot buffer on each side of the Project pipeline limits of disturbance—which consisted of a 300-foot-wide survey corridor totaling 118.76 acres—for wetlands and other waters that may be considered waters of the United States (WOTUS) as defined by the U.S. Army Corps of Engineers (USACE) or state waters regulated by the CDPHE. Concurrently, an SWCA biologist evaluated the survey corridor for the presence of suitable habitat for migratory birds and special-status state-listed and federally listed species, including the mountain plover (*Charadrius montanus*) and long-billed curlew (*Numenius americanus*). In addition, SWCA surveyed a 660-foot buffer surrounding the Project limits of disturbance for prairie dog (*Cynomys* sp.) burrows, which may provide suitable nesting habitat for burrowing owl (*Athene cunicularia*), and a 0.5-mile buffer surrounding the Project limits of disturbance for raptor nests.

2 METHODS

2.1 Desktop Analysis

Prior to the field survey, SWCA conducted a desktop analysis of available records to review documented environmental resources within the general vicinity of the survey corridor. This consisted of reviewing U.S. Geological Survey (USGS) 7.5-minute quadrangles (Esri 2025), the USGS National Land Cover Database (NLCD) (USGS 2021), historical and current aerial photographs (Google Earth 2024), Natural Resources Conservation Service (NRCS) soil survey data (NRCS 2025), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2025a), the National Hydrography Dataset (NHD) (USGS 2023), USFWS Information for Planning and Consultation (IPaC) tool (USFWS 2025b), Colorado's Conservation Data Explorer (CODEX) (Colorado Natural Heritage Program [CNHP] 2025), Colorado Parks and Wildlife (CPW) lists of state-listed species (CPW 2025), and CPW high priority habitat (HPH) (CPW 2024).

2.2 Field Survey

Two SWCA biologists conducted a pedestrian field survey of the survey corridor on October 7, 2025. The field survey focused on aquatic resources, including wetlands, ditches, and streams, and special-status plants and wildlife species and their habitats. The biologists used handheld computer tablets with Esri ArcGIS Field Maps to record data. Tablets were loaded with GPS data for the pipeline center line, limits of disturbance, survey buffers, public roads, NHD and NWI features, and landownership layers to ensure accurate mapping and survey. The survey corridor and species-specific buffer zones are depicted on the maps provided in Appendix A. Overview photographs are provided in Appendix B.

2.2.1 Wildlife Habitat and Special-Status Species

The biologists recorded general wildlife habitat, vegetation communities, and habitat suitable for special-status species within the survey corridor to identify potential constraints associated with pipeline construction activities. The special-status species evaluation consisted of a habitat review for 1) all federally listed (i.e., endangered and threatened) species, 2) additional species listed by the USFWS as candidate and proposed species and species under review, 3) state-listed species, and 4) migratory birds and raptors.

The potential for wildlife species' occurrence is based on existing information on distribution and on qualitative comparisons of the habitat requirements of each species with vegetation communities, landscape features, and/or water quality conditions in the survey corridor. The potential for occurrence is summarized according to the following categories:

- *Known to occur*: The species was documented either during or prior to the field survey by a reliable observer.
- *May occur*: The survey corridor is within the species' currently known range, and vegetation communities, soils, and water quality conditions, etc., resemble those known to be used by the species.
- *Unlikely to occur*: The survey corridor is within the species' currently known range, but vegetation communities, soils, and water quality conditions, etc., do not resemble those known to be used by the species.
- *None*: The survey corridor is clearly outside the species' currently known range, and vegetation communities, soils, and water quality conditions, etc., do not resemble those known to be used by the species.

Possible impacts to these species are evaluated based on reasonably foreseeable Project-related activities and the potential loss of habitat.

2.2.2 Aquatic Resources

The SWCA biologists conducted an aquatic resources inventory, which included identifying and recording wetlands and other waters that the USACE may determine to be WOTUS or state waters regulated by the CDPHE. WOTUS includes aquatic resources, such as rivers, creeks, streams, arroyos, lakes, and associated wetlands, that have the requisite relative permanence and connectivity to downstream navigable waters. State waters include any surface and subsurface waters that are contained in or flow through the state.

Under Section 404 of the CWA, wetlands are aquatic resources that “are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACE 1987). Other waters are generally identified and delineated by the presence of an ordinary high water mark (OHWM). An OHWM is the line on a shore established by fluctuations of water and is typically identified by physical characteristics, such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate signs that consider the characteristics of the surrounding areas.

2.2.2.1 WETLANDS

The presence or absence of wetlands is determined in the field via the use of delineation methods provided in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (Regional Supplement) (USACE 2010). Data at each potential wetland are recorded on Regional Supplement wetland determination data forms. Wetland boundaries are delineated where hydrophytic vegetation, hydric soils, and hydrology are present.

2.2.2.2 OTHER WATERS

The extent of other waters (e.g., creeks, rivers, arroyos, ponds, and constructed ditches) is determined in the field via the use of the guidance and methods provided in USACE *Regulatory Guidance Letter 05-05* (USACE 2005) and the USACE technical guidance in the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Final Version* (David et al. 2025).

3 RESULTS

3.1 Land Use and General Wildlife Habitat

USGS (2021) NLCD data indicate that the dominant land cover types within the survey corridor consist of developed open space (0.18 acre), developed high intensity (0.30 acre), developed low intensity (2.24 acres), developed medium intensity (12.76 acres), cultivated crops (24.60 acres), and grassland/herbaceous (78.67 acres). The primary land uses identified within the survey corridor and adjacent areas during the October 2025 field survey consist of open rangeland, grassland, and cultivated crops.

Dominant species found on-site included smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), kochia (*Bassia scoparia*), prickly Russian thistle (*Salsola tragus*), western wheatgrass (*Pascopyrum smithii*), and common mullein (*Verbascum thapsus*).

Additionally, two List C noxious weed species were observed within the survey corridor; these species consisted of field bindweed (*Convolvulus arvensis*) and cheatgrass (*Bromus tectorum*). List C noxious weeds are widespread throughout the state of Colorado and are not controlled at a state level; however, local governments can opt to control and regulate these species through the use of local ordinances (Colorado Department of Agriculture 2025).

3.2 Soils

According to NRCS soil survey data for Adams and Arapahoe Counties, Colorado, eight soil map units are present within the survey corridor (Table 1).

Table 1. Soil Map Units within the Survey Corridor

Soil Map Unit Symbol	Soil Map Unit Name	Prime Farmland	Hydric Rating	Acres in Survey Corridor*
AsB	Ascalon sandy loam, 0 to 3 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	No	7.29
AvC	Ascalon-Vona sandy loams, 1 to 5 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	No	2.95
NrB	Nunn-Bresser-Ascalon complex, 0 to 3 percent slopes	Prime farmland if irrigated	No	16.93
TrB	Truckton loamy sand, 0 to 3 percent slopes	Farmland of statewide importance	No	50.27
TrC	Truckton loamy sand, 3 to 5 percent slopes	NA	No	16.75
TtB	Truckton loamy sand, 0 to 3 percent slopes	Farmland of statewide importance	No	18.64
TtC	Truckton loamy sand, 3 to 5 percent slopes	NA	No	3.03
VnD	Vona loamy sand, 3 to 9 percent slopes	Not prime farmland	No	2.90
Total				118.76

Source: NRCS (2025)

* Acreage may vary due to rounding.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. Only a small percentage of the survey corridor was being actively farmed during the October 2025 field survey, this farmland was dryland and was not irrigated. None of the soil map units within the survey corridor have a hydric soil rating.

3.3 Wildlife Habitat and Special-Status Species

3.3.1 Federally and State-Listed Species

SWCA reviewed and analyzed the likelihood of federally listed and state-listed species to occur within the survey corridor. The federally listed species evaluated were based on the IPaC resource list of threatened, endangered, and candidate species that was generated for the survey corridor (USFWS 2025b). State species evaluated were based on the list of threatened, endangered, or state special concern species from the CODEX report that was generated for the survey corridor plus a 1-mile buffer (CNHP 2025).

In the state of Colorado, species of special concern are those that are listed by CPW due to a decline in population or habitat but are not listed as threatened or endangered. Species of special concern do not have Colorado statutory requirements; therefore, no regulatory implications are anticipated, and these species were not discussed further in this section or included in Table 2. If species of special concern are identified within the survey corridor, DJ South Gathering should implement best management practices to minimize impacts to these species and associated habitats to the extent practicable.

The piping plover (*Charadrius melodus*) is listed as threatened, and the pallid sturgeon (*Scaphirhynchus albus*) is listed as endangered under the ESA. The USFWS IPaC resource list states that these species only need to be considered if the Project includes water-related activities and/or use in the North Platte, South Platte, or Laramie River Basins. The Project is not anticipated to include water-related activities, and no habitat was found within the survey corridor for these species. Additionally, the monarch butterfly (*Danaus plexippus*), a proposed threatened species, and the Suckley's cuckoo bumble bee (*Bombus suckleyi*), a proposed endangered species, are also on the IPaC resource list. No critical habitats intersect the survey corridor, and these species are unlikely to occur within the survey corridor. Other federally listed species on the USFWS IPaC resource list are included in Table 2 below; however, these species are unlikely to occur or have no potential to occur within the survey corridor due to the lack of suitable habitat within the survey corridor.

In addition to its federal status, the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) is designated as a state-threatened species and is listed in the CODEX report as a potential regulatory concern within the survey corridor. This species is listed by CODEX due to the intersection of the CPW overall range with the survey corridor (CNHP 2025). Similarly, the burrowing owl is also classified as a state-threatened species and is listed in the CODEX report, as the CPW breeding range for this species intersects the survey corridor (CNHP 2025). Table 2 lists the species identified by the IPaC list (USFWS 2025b) and CODEX report (CNHP 2025) and their potential to occur within the survey corridor.

Table 2. State-Listed and Federally Listed Special-Status Species and Their Potential to Occur Within the Survey Corridor

Common Name (scientific name)	Status*	Potential to Occur
Mammals		
Preble's meadow jumping mouse (<i>Zapus hudsonius preblei</i>)	FT, ST	Unlikely to occur. The survey corridor is within the CPW-mapped overall range of the species; however, the survey corridor lacks suitable habitat (e.g., riparian areas with dense shrubs, grass, and forb ground cover along creeks, rivers, and associated water bodies).
Birds		
Burrowing owl (<i>Athene cunicularia</i>)	ST	Unlikely to occur. The survey corridor is within the CPW-mapped breeding range for the species, but no prairie dog colonies or individuals were observed within the 660-foot buffer during the October 2025 field survey.
Piping plover (<i>Charadrius melodus</i>)	FT, ST	None. The survey corridor is outside the species' known range and lacks suitable habitat (along ocean and lakeshores). The species is a rare migrant in Colorado.
Whooping crane (<i>Grus americana</i>)	FE, SE	None. The survey corridor lacks suitable habitat (e.g., estuarine marshes, shallow bays, and tidal flats) and is outside the species' expected range.
Fish		
Pallid sturgeon (<i>Scaphirhynchus albus</i>)	FE	None. The survey corridor does not contain any flowing streams or viable habitat and is outside the species' expected range. This Project is not anticipated to include water-related activities.

Common Name (scientific name)	Status*	Potential to Occur
Insects		
Monarch butterfly (<i>Danaus plexippus</i>)	PFT	Unlikely to occur. Adult monarch butterflies lay eggs on milkweed plants, as that is the sole food source the caterpillars will eat. The survey corridor did not contain any milkweed (<i>Asclepias</i> spp).
Suckley's cuckoo bumble bee (<i>Bombus suckleyi</i>)	PFE	Unlikely to occur. This species uses the nests of other bumble bee species as habitat. No nests were observed within the survey corridor during the October 2025 field survey.
Plants		
Ute ladies'-tresses (<i>Spiranthes diluvialis</i>)	FT	Unlikely to occur. The survey corridor does not contain suitable habitat (e.g., seasonally flooded river terraces, sub irrigated or spring-fed abandoned stream channels and valleys, lakeshores, irrigation canals, berms, levees, irrigated meadows, gravel pits, barrow pits, reservoirs, and other human-impacted wetlands).
Western prairie fringed orchid (<i>Platanthera praeclara</i>)	FT	Unlikely to occur. The survey corridor does not contain suitable habitat (moist tallgrass prairies and sedge meadows).

Sources: CPW (2025); eBird (2021); USFWS (2025a)

* FE = federally endangered; FT = federally threatened; PFE = proposed federally endangered; PFT = proposed federally threatened; SE = state-endangered; ST = state-threatened

3.3.2 **Prairie Dogs**

The black-tailed prairie dog (*Cynomys ludovicianus*) is a burrowing mammal that typically inhabits short grass and mixed-grass prairies and desert grasslands. Black-tailed prairie dogs and their colonies are known to provide habitat for other special-status wildlife species, such as the mountain plover and western burrowing owl (*Athene cunicularia hypugaea*), and are prey for other special-status species, such as the golden eagle (*Aquila chrysaetos*) and ferruginous hawk (*Buteo regalis*). There were no prairie dog colonies found within the survey corridor or within the 660-foot buffer.

3.3.3 **Colorado Parks and Wildlife High Priority Habitat**

Colorado Senate Bill 19-181 requires oil and gas development and operations in Colorado to be regulated in ways that protect public health, safety, welfare, the environment, and wildlife resources. In response, the Colorado Energy and Carbon Management Commission (ECMC) completed a series of rulemakings in 2020 to implement the bill's requirements. As part of these efforts, the ECMC established the concept of HPH areas identified as especially important for wildlife conservation. HPH includes specific habitat areas mapped by CPW, which are detailed in Appendix VII of the ECMC's Rules.

The survey corridor does not intersect any CPW-mapped HPH; therefore, it is not anticipated to require coordination with CPW.

3.3.4 **Raptors and Migratory Birds**

The results of the desktop analysis indicated that no nests were previously mapped by CPW within the 0.5-mile raptor buffer. During the October 2025 field survey, no raptor nests were observed within the Project limits of disturbance. Two potential raptor nesting habitat areas were observed within the 0.5-mile raptor buffer. These potential raptor nesting habitat areas have been identified as RNH_01 and RNH_02 and parallel to I-70. No raptor nests were observed within the 0.5-mile raptor buffer; however, the survey was conducted outside of the nesting season for most raptors in Colorado (February 1–July 31). Additionally, visibility surrounding RNH_01 and RNH_02 was low due to dense foliage, and these locations were flagged as potential nesting habitat (Figure A-3, B-25, and B-26).

According to the CODEX report (CNHP 2025), the survey corridor is within the CPW-designated breeding range of the golden eagle; however, no individual bald eagles (*Haliaeetus leucocephalus*) or golden eagles were observed within the survey corridor or 0.5-mile raptor buffer.

The October 2025 field survey was conducted outside the migratory bird nesting season (April 1–August 31), and no migratory bird nests were found within the survey corridor. Under the MBTA, it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale any migratory bird or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued by USFWS.

Initial desktop review identified potential habitat for the mountain plover and long-billed curlew within the survey corridor; however no suitable habitat for these species was observed within the survey corridor during the October 2025 field survey. The survey corridor primarily consisted of disturbed and nonnative grasslands and a small percentage of actively managed agricultural areas. The areas lacked suitable habitat for mountain plovers and long-billed curlew.

3.4 Aquatic Resources

The survey corridor is within the Lost Creek Watershed (hydrologic unit code 1019000309). A review of Federal Emergency Management Agency (FEMA) data indicated that the survey corridor does not intersect any FEMA-mapped flood zones; however, just north of I-70 (outside of the survey corridor), a NHD-mapped flowline, West Sand Creek, is associated with a Zone A (floodplain), which is an area with a 1% annual chance of flooding (Figure A-4) (FEMA 2025). According to the existing data review, one NHD-mapped flowline and two NWI-mapped wetlands are within the survey corridor (USFWS 2025a; USGS 2023) (Table 3; see Figure A-3).

Table 3. NHD and NWI Features Mapped within the Survey Corridor

Aquatic Resource	Acres in Survey Corridor	Length in Survey Corridor (linear feet)	Feature Count
NHD Flowline			
Intermittent Stream/River	–	655.12	1
NWI Wetlands			
Other	0.339	–	1
Riverine	0.299	–	1

Sources: USFWS (2025a); USGS (2023)

3.4.1 Wetlands

No features meeting wetland criteria (i.e., presence of wetland hydrology, hydrophytic vegetation, and hydric soils) (USACE 1987) were observed within the survey corridor.

3.4.2 Other Waters

One isolated waterbody feature (OHWM01; 0.02 acre) that exhibited an OHWM was mapped within the survey corridor during the October 2025 field survey. The feature contained a high percentage of sand deposition, lower vegetation density, and scattered *Juncus* spp. within its boundary. Based on field observations and an analysis of historic and current aerial imagery, it appears that OHWM01 has likely developed within the historic channel boundary of West Sand Creek due to increased stormwater runoff from I-70. A large concrete box culvert was observed underneath of I-70, northwest of OHWM01. A

negative determination point was collected both up (NDP_02) and down gradient (NDP_01) from OHWM01 to document upland conditions within the historic boundary of West Sand Creek, which was dominated by upland vegetation and lacked any OHWM or wetland indicators. Data sheets for the negative determination points are included in Appendix C. This area will not be impacted by the proposed project.

4 SUMMARY AND CONCLUSION

Two SWCA biologists conducted a pedestrian field survey of the survey corridor on October 7, 2025. The survey was conducted to assess potential impacts to sensitive biological resources, including aquatic resources and special-status species, and assessed Project compliance with Section 404 of the CWA; CDPHE regulation, Discharges of Dredged and Fill Material into State Waters under House Bill 24-1379; the ESA; the MBTA; the Bald and Golden Eagle Protection Act as amended; and Colorado Revised Statute 33-2-105, which provides protections for state-listed threatened and endangered species.

USGS (2021) NLCD data indicate that the dominant land cover types within the survey corridor consist of developed open space (0.18 acre), developed high intensity (0.26 acre), developed low intensity (2.01 acres), developed medium intensity (10.4 acres), cultivated crops (19.49 acres), and grassland/herbaceous (75.95 acres). The primary land uses identified within the survey corridor and adjacent areas during the October 2025 field survey consist of open rangeland, grassland, and cultivated crops.

The survey corridor does not intersect any CPW-mapped HPH; therefore, it is not anticipated to require coordination with CPW.

No raptor nests were observed in the Project limits of disturbance. No raptor nests were observed within the 0.5-mile raptor buffer during the October 2025 field survey; however, visibility surrounding RNH_01 and RNH_02 was low due to dense foliage, and these locations were flagged as potential nesting habitat that could not be verified for the presence or absence of raptor nests due to visibility constraints (see Figure A-3). According to the CODEX report (CNHP 2025), the survey corridor is within the CPW-designated breeding range of the golden eagle; however, no individual bald eagles or golden eagles were observed within the survey corridor or 0.5-mile raptor buffer. No timing or spatial constraints are anticipated. If construction is proposed to occur within the nesting season for most raptors in Colorado (February 1–July 31), preconstruction raptor nest surveys are recommended due to the presence of potentially suitable habitat within the 0.5-mile buffer (CPW 2020). Additionally, if any active nests are encountered during construction, DJ South Gathering should contact SWCA immediately.

The October 2025 field survey was conducted outside of the migratory bird nesting season (April 1–August 31), and no incidental passerine nests were found within the survey corridor. If construction is proposed to occur within the migratory bird ground-nesting season (April 1–August 31) (CPW 2023), preconstruction MBTA ground nest clearance surveys are recommended due to the presence of potentially suitable habitat within the survey corridor. Additionally, if any active nests are encountered during construction, DJ South Gathering should contact SWCA immediately. Removal or disturbance of any active migratory bird nest requires consultation with the USFWS prior to disturbance.

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APPENDIX A

Maps

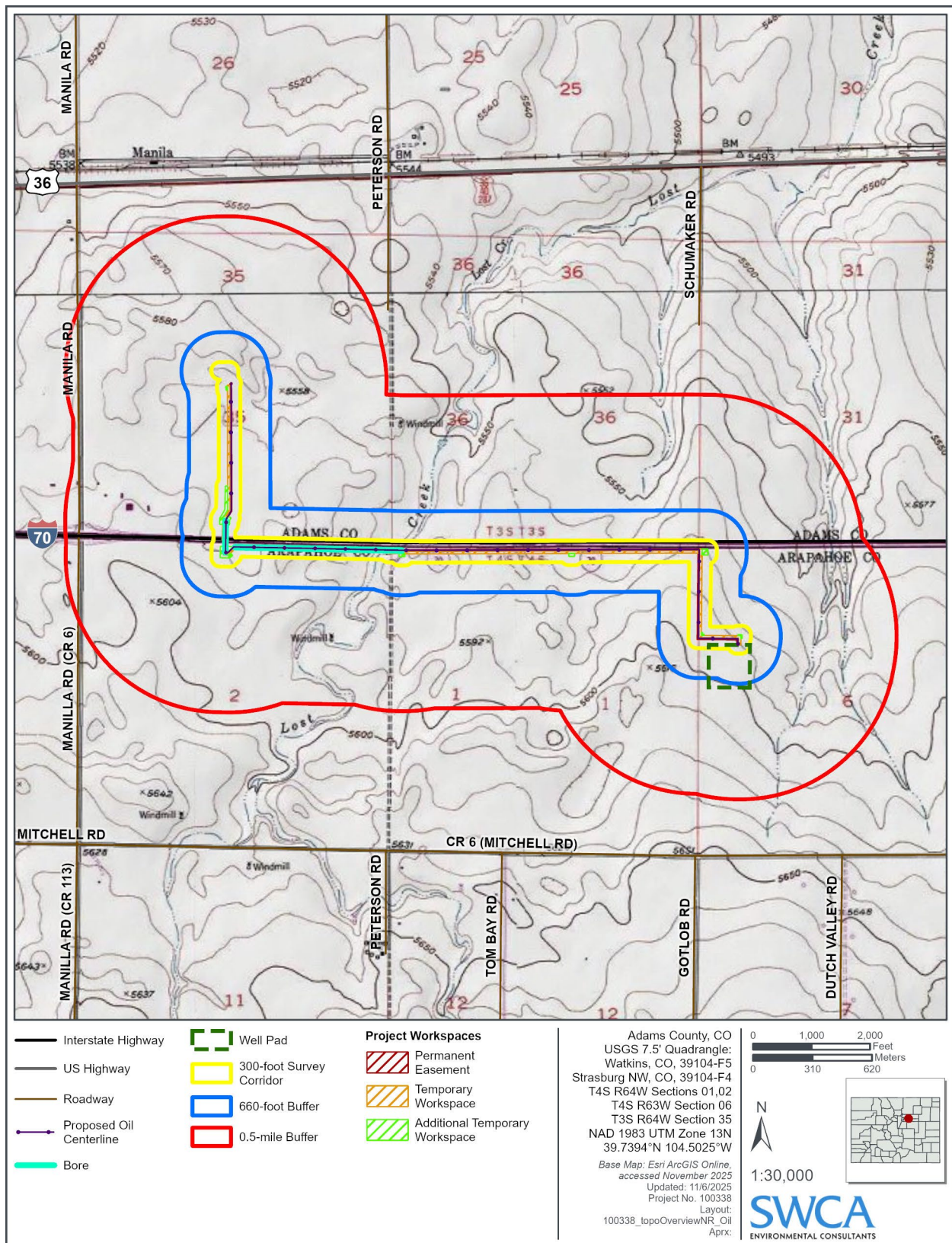


Figure A-1. Topographic overview of Project.

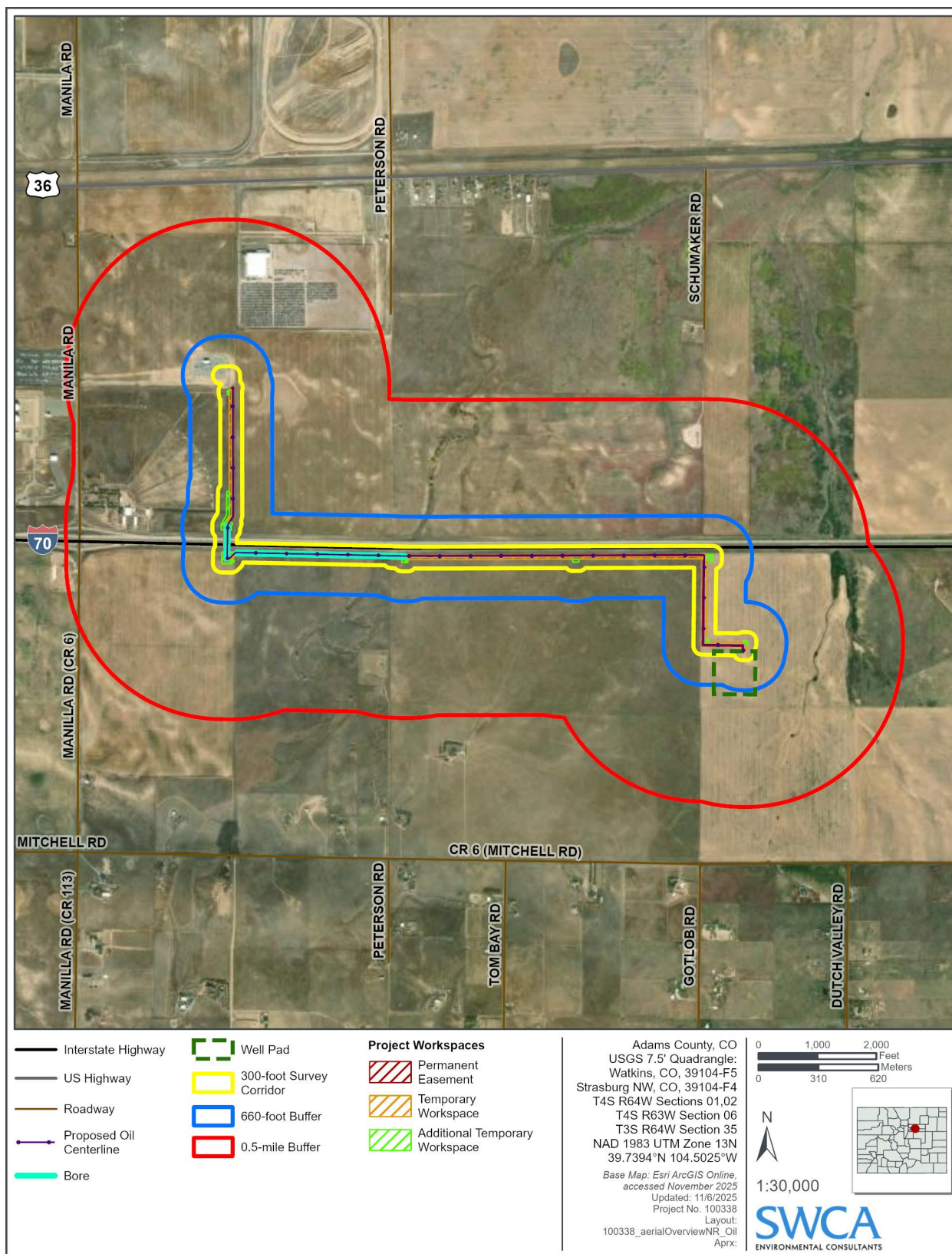


Figure A-2. Aerial overview of Project.

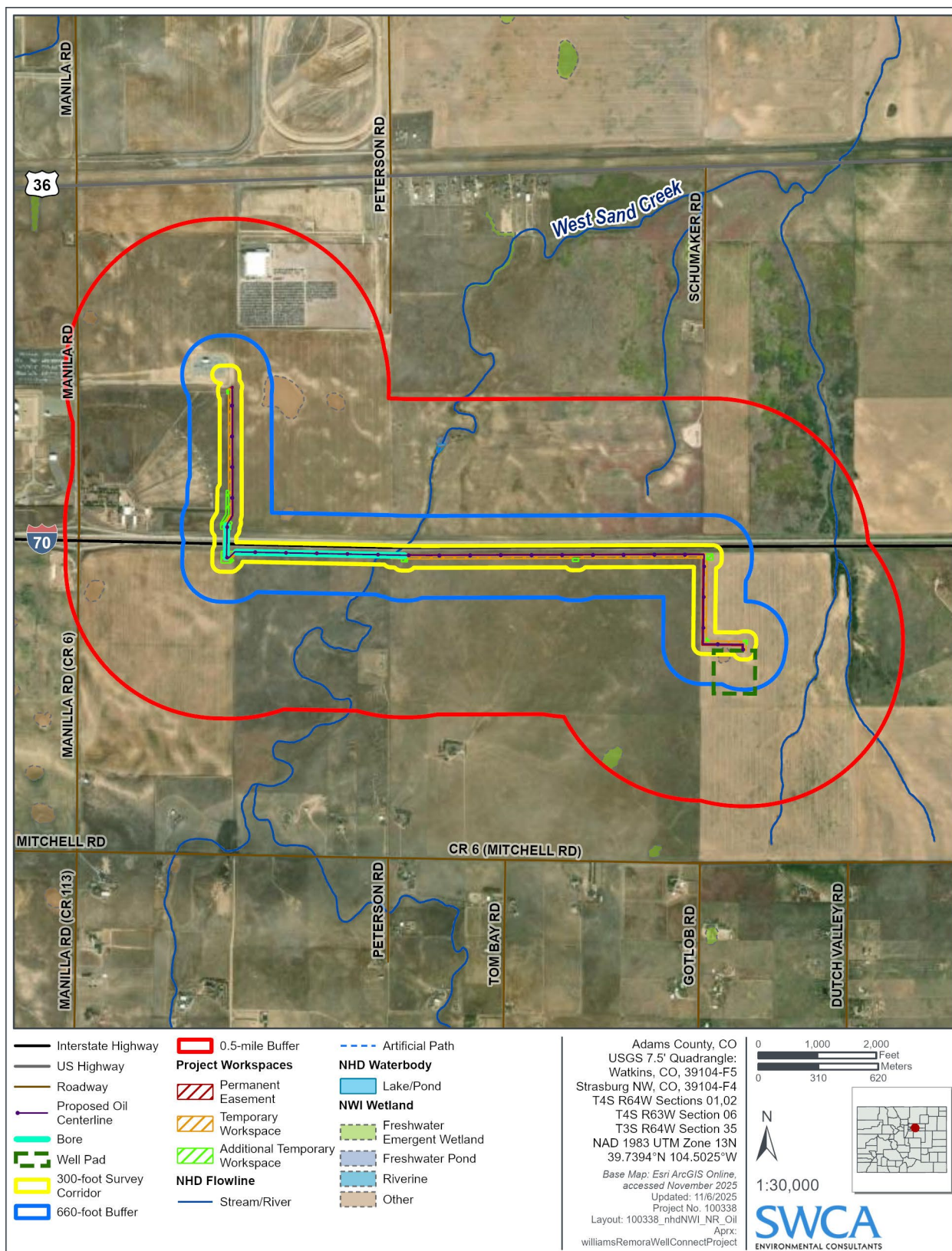


Figure A-3. NWI- and NHD-mapped desktop features.

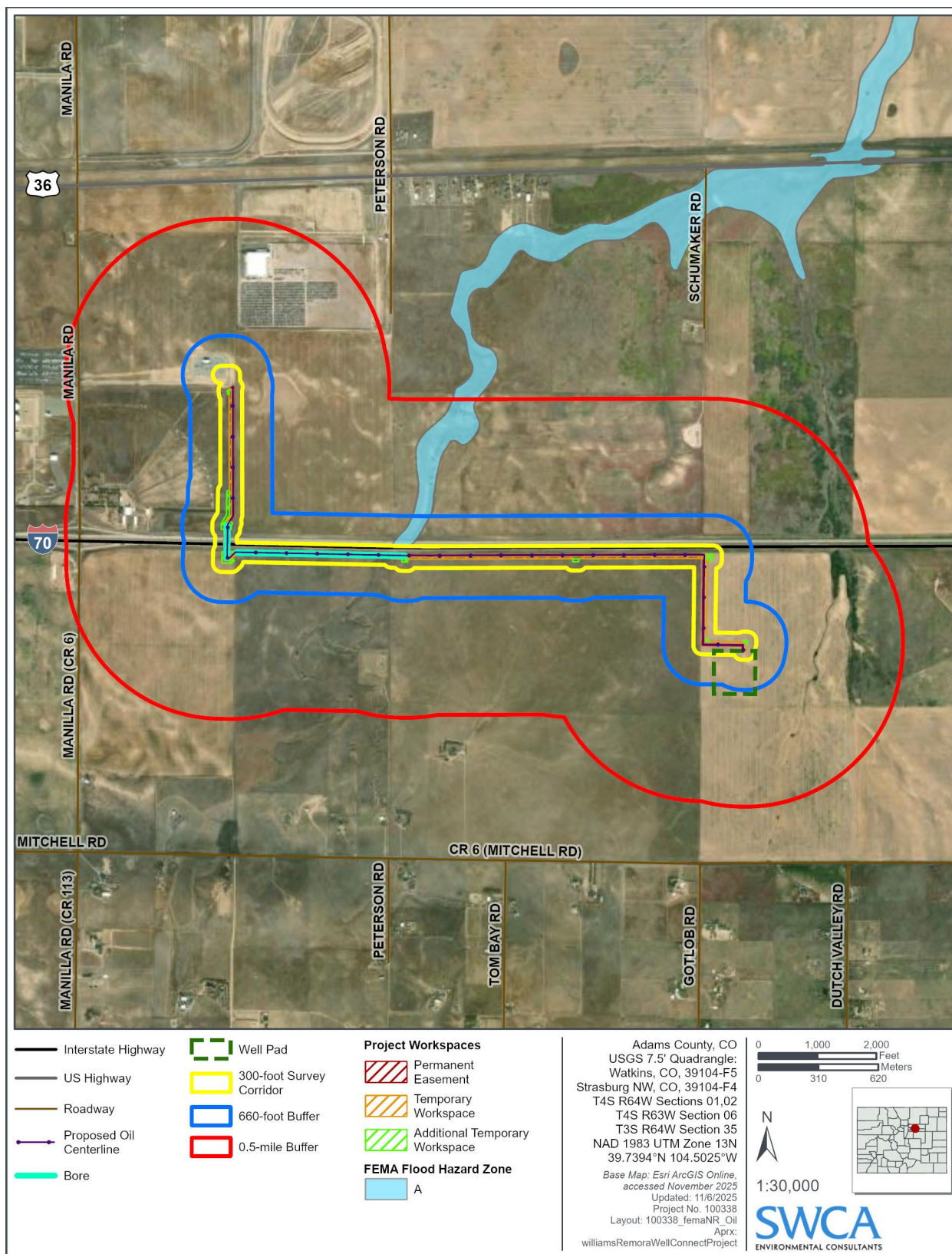


Figure A-4. FEMA-mapped flood hazard zones.

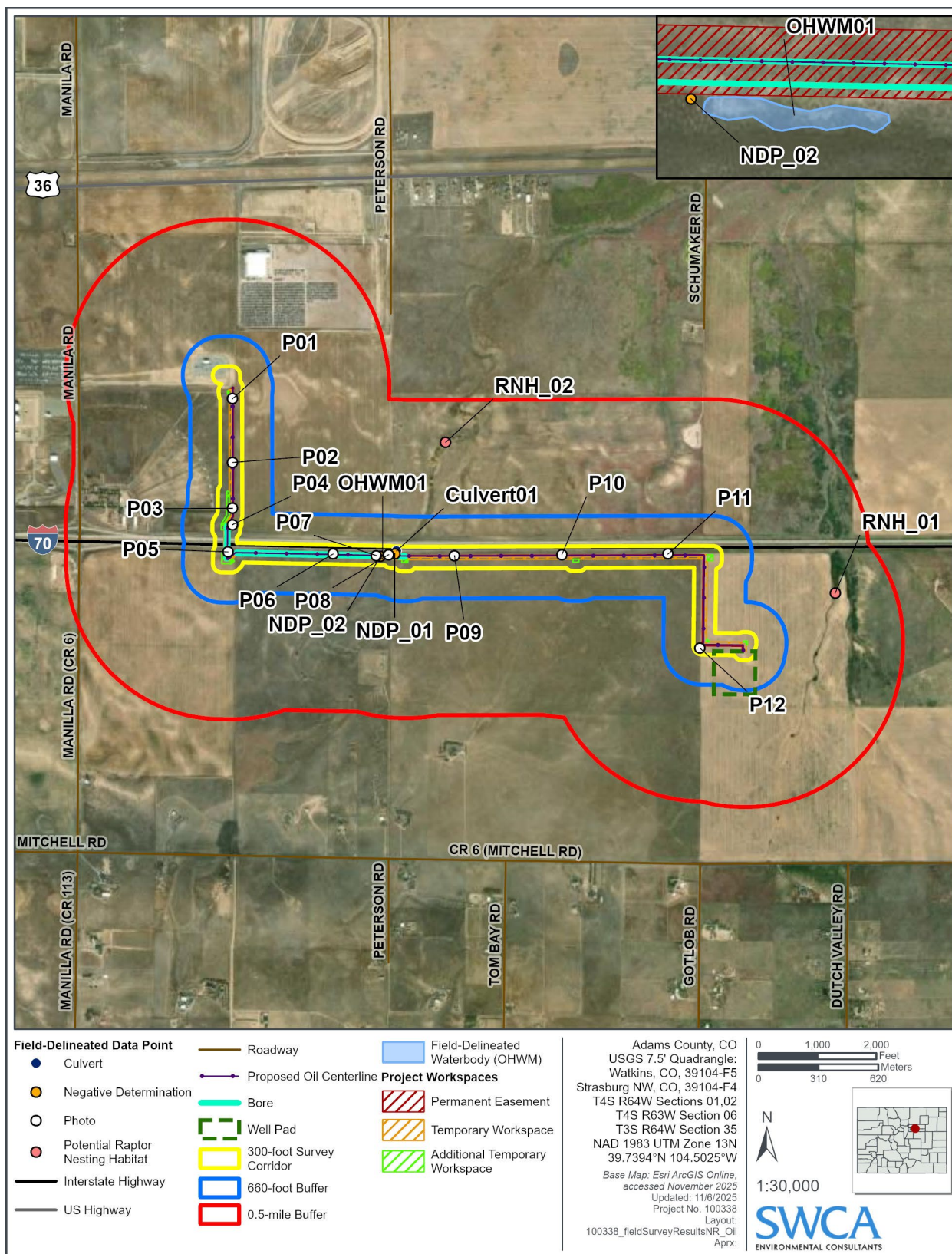


Figure A-6. Field survey results.

APPENDIX B

Site Photographs



Figure B-1. P01; view facing south.



Figure B-2. P02; view facing south.



Figure B-3. P03; view facing south.



Figure B-4. P04; view facing south.



Figure B-5. P05; view facing east.



Figure B-6. P06; view facing west.



Figure B-7. P07; view facing south.



Figure B-8. P08; view facing west.



Figure B-9. P09; view facing east.



Figure B-10. P10; view facing east.



Figure B-11. P11; view facing east.



Figure B-12. P12; view facing east.



Figure B-13. NDP_01; view facing north



Figure B-14. NDP_01; view facing east.



Figure B-15. NDP_01; view facing south.



Figure B-16. NDP_01; view facing west.



Figure B-17. NDP_01; soils.



Figure B-18. NDP_02; view facing north.



Figure B-19. NDP_02; view facing east.



Figure B-20. NDP_02; view facing south.



Figure B-21. NDP_02; view facing west.



Figure B-22. PP11; view facing east.



Figure B-23. OHWM01; view facing east.



Figure B-24. Culvert northeast of OHWM01; view facing northeast.



Figure B-25. Overview of RNH_01.



Figure B-26. Overview of RNH_02.

APPENDIX C

Data Sheets

WETLAND DETERMINATION DATA FORM — Great Plains Region

Project/Site: Williams Remora Well Connection City/County: Adams County Sampling Date: 10/07/2025

Applicant/Owner: DJ South Gathering, LLC State: CO Sampling Point: NDP 01

Investigator(s): C.Walker Section, Township, Range: Sec. 01 T4S R64W

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR): LRR G Lat: 39.738271 Long: -104.507929 Datum: NAD 83

Soil Map Unit Name: TrB - Truckton loamy sand, 0 to 3 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: _____	No: <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes: _____	No: <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes: _____	No: <input checked="" type="checkbox"/>		

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum: (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (excluding FAC-): <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Domant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																																											
1. _____	_____	_____	_____																																												
2. _____	_____	_____	_____																																												
3. _____	_____	_____	_____																																												
4. _____	<u>0</u>	_____	_____																																												
<u>0</u> =Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>410</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A= <u>4.56</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>90</u> (A)	<u>410</u> (B)	Prevalence Index = B/A= <u>4.56</u>																												
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Sapling/Shrub Stratum: (Plot size: 15') 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ <u>0</u> =Total Cover																																															
Herb Stratum: (Plot size: 5') <table border="0"> <tr> <td>1. <i>Bromus inermis</i></td> <td><u>50</u></td> <td><u>Y</u></td> <td><u>UPL</u></td> </tr> <tr> <td>2. <i>Glycyrrhiza lepidota</i></td> <td><u>15</u></td> <td><u>N</u></td> <td><u>FACU</u></td> </tr> <tr> <td>3. <i>Chenopodium album</i></td> <td><u>15</u></td> <td><u>N</u></td> <td><u>FACU</u></td> </tr> <tr> <td>4. <i>Pascopyrum smithii</i></td> <td><u>10</u></td> <td><u>N</u></td> <td><u>FACU</u></td> </tr> <tr> <td>5. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>6. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>7. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>8. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>9. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>10. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td colspan="4"><u>90</u> =Total Cover</td> </tr> </table>				1. <i>Bromus inermis</i>	<u>50</u>	<u>Y</u>	<u>UPL</u>	2. <i>Glycyrrhiza lepidota</i>	<u>15</u>	<u>N</u>	<u>FACU</u>	3. <i>Chenopodium album</i>	<u>15</u>	<u>N</u>	<u>FACU</u>	4. <i>Pascopyrum smithii</i>	<u>10</u>	<u>N</u>	<u>FACU</u>	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	<u>90</u> =Total Cover			
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Woody Vine Stratum: (Plot size: 30') 1. _____ 2. _____ <u>0</u> =Total Cover																																															
% Bare Ground in Herb Stratum <u>10</u>																																															

Remarks:

SOIL

Sampling Point: NDP_01

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		
Primary indicators (minimum of one required: check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM — Great Plains Region

Project/Site: Williams Remora Well Connection City/County: Arapahoe Sampling Date: 10/07/2025

Applicant/Owner: DJ South Gathering, LLC State: CO Sampling Point: NDP 02

Investigator(s): C.Walker Section, Township, Range: Sec. 02 T4S R64W

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR): LRR G Lat: 39.738285 Long: -104.508793 Datum: NAD 83

Soil Map Unit Name: TrB - Truckton loamy sand, 0 to 3 percent slopes NWI classification: No

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: <u> </u>	No: <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes: <u> </u>	No: <u>X</u>		
Wetland Hydrology Present?	Yes: <u>X</u>	No: <u> </u>		

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum: (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (excluding FAC-): <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Domant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u>0</u>	<u> </u>	<u> </u>																	
<u>0</u> =Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>220</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A= <u>4.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>55</u> (A)	<u>220</u> (B)	Prevalence Index = B/A= <u>4.00</u>	
Total % Cover of:	Multiply by:																			
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Sapling/Shrub Stratum: (Plot size: 15') 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u>0</u> =Total Cover																				
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Woody Vine Stratum: (Plot size: 30') 1. <u> </u> 2. <u> </u> <u>0</u> =Total Cover																				
% Bare Ground in Herb Stratum <u>45</u>																				
Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																				
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																				
Remarks:																				

SOIL

Sampling Point: NDP_02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	2.5Y 7/3	100		0	NA	NA	Sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Stratified Layers (A5) (LRR F) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) <input type="checkbox"/> High Plains Depressions (F16) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
---	---


Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary indicators (minimum of one required: check all that apply)			Secondary indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where not tilled) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

Exhibit H
Cultural Resources Report

The logo for SWCA (Soil & Water Conservation Agency) is positioned vertically on the left side of the page. It consists of the letters 'S', 'W', 'C', and 'A' in a large, stylized, light blue font, stacked one above the other.

Natural Resources Survey Report for the Remora Well Connection Natural Gas Pipeline Project, Adams and Arapahoe Counties, Colorado

NOVEMBER 2025

PREPARED FOR

**Rocky Mountain Midstream LLC, a
subsidiary of Williams Companies, Inc**

PREPARED BY

SWCA Environmental Consultants

NATURAL RESOURCES SURVEY REPORT FOR THE REMORA WELL CONNECTION NATURAL GAS PIPELINE PROJECT, ADAMS AND ARAPHOE COUNTIES, COLORADO

Prepared for

Rocky Mountain Midstream LLC, a subsidiary of Williams Companies, Inc
13781 Pacific Circle
Mead, Colorado 80542

Prepared by

SWCA Environmental Consultants
295 Interlocken Boulevard, Suite 300
Broomfield, Colorado 80021
(303) 487-1183
www.swca.com

SWCA Project No. 100338

November 2025

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1 INTRODUCTION

Rocky Mountain Midstream LLC (RMM), a subsidiary of Williams Companies, Inc, is proposing to construct the Remora Well Connection Pipeline Project (Project) in Adams and Arapahoe Counties, Colorado. On behalf of RMM, SWCA Environmental Consultants (SWCA) completed a natural resources desktop analysis and field survey to assess potential impacts to sensitive natural resources, including aquatic resources and special-status species, and to assess Project compliance with Section 404 of the Clean Water Act (CWA); Colorado Department of Public Health and Environment (CDPHE) regulation, Discharges of Dredged and Fill Material into State Waters under House Bill 24-1379; the Endangered Species Act (ESA); the Migratory Bird Treaty Act (MBTA); the Bald and Golden Eagle Protection Act as amended; and Colorado Revised Statute 33-2-105, which provides protections for state-listed threatened and endangered species.

The Project consists of an approximately 2.6-mile-long, up to 10-inch diameter carbon steel natural gas pipeline and associated appurtenances that will connect the Remora well pad to the Williams Watkins Compressor Station (Figure A-1 in Appendix A). The Project will parallel a crude oil pipeline that will be installed by Elevation Midstream LLC. The Project is entirely on privately owned land, with construction scheduled to begin in the second or third quarter of 2026. The Project pipeline limits of disturbance may include portions of a 9.21-acre permanent easement, a 9.63-acre temporary workspace, and a 2.02-acre additional temporary workspace. The Project will use horizontal directional drilling to bore under Interstate 70 (I-70), as well as two parcels located south of I-70. The total bore length is approximately 3,385 feet. SWCA evaluated a 150-foot buffer on each side of the Project pipeline limits of disturbance—which consisted of a 300-foot-wide survey corridor totaling 118.76 acres—for wetlands and other waters that may be considered waters of the United States (WOTUS) as defined by the U.S. Army Corps of Engineers (USACE) or state waters regulated by the CDPHE. Concurrently, an SWCA biologist evaluated the survey corridor for the presence of suitable habitat for migratory birds and special-status state-listed and federally listed species, including the mountain plover (*Charadrius montanus*) and long-billed curlew (*Numenius americanus*). In addition, SWCA surveyed a 660-foot buffer surrounding the Project limits of disturbance for prairie dog (*Cynomys* sp.) burrows, which may provide suitable nesting habitat for burrowing owl (*Athene cunicularia*), and a 0.5-mile buffer surrounding the Project limits of disturbance for raptor nests.

2 METHODS

2.1 Desktop Analysis

Prior to the field survey, SWCA conducted a desktop analysis of available records to review documented environmental resources within the general vicinity of the survey corridor. This consisted of reviewing U.S. Geological Survey (USGS) 7.5-minute quadrangles (Esri 2025), the USGS National Land Cover Database (NLCD) (USGS 2021), historical and current aerial photographs (Google Earth 2024), Natural Resources Conservation Service (NRCS) soil survey data (NRCS 2025), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2025a), the National Hydrography Dataset (NHD) (USGS 2023), USFWS Information for Planning and Consultation (IPaC) tool (USFWS 2025b), Colorado's Conservation Data Explorer (CODEX) (Colorado Natural Heritage Program [CNHP] 2025), Colorado Parks and Wildlife (CPW) lists of state-listed species (CPW 2025), and CPW high priority habitat (HPH) (CPW 2024).

2.2 Field Survey

Two SWCA biologists conducted a pedestrian field survey of the survey corridor on October 7, 2025. The field survey focused on aquatic resources, including wetlands, ditches, and streams, and special-status plants and wildlife species and their habitats. The biologists used handheld computer tablets with Esri ArcGIS Field Maps to record data. Tablets were loaded with GPS data for the pipeline center line, limits of disturbance, survey buffers, public roads, NHD and NWI features, and landownership layers to ensure accurate mapping and survey. The survey corridor and species-specific buffer zones are depicted on the maps provided in Appendix A. Overview photographs are provided in Appendix B.

2.2.1 Wildlife Habitat and Special-Status Species

The biologists recorded general wildlife habitat, vegetation communities, and habitat suitable for special-status species within the survey corridor to identify potential constraints associated with pipeline construction activities. The special-status species evaluation consisted of a habitat review for 1) all federally listed (i.e., endangered and threatened) species, 2) additional species listed by the USFWS as candidate and proposed species and species under review, 3) state-listed species, and 4) migratory birds and raptors.

The potential for wildlife species' occurrence is based on existing information on distribution and on qualitative comparisons of the habitat requirements of each species with vegetation communities, landscape features, and/or water quality conditions in the survey corridor. The potential for occurrence is summarized according to the following categories:

- *Known to occur*: The species was documented either during or prior to the field survey by a reliable observer.
- *May occur*: The survey corridor is within the species' currently known range, and vegetation communities, soils, and water quality conditions, etc., resemble those known to be used by the species.
- *Unlikely to occur*: The survey corridor is within the species' currently known range, but vegetation communities, soils, and water quality conditions, etc., do not resemble those known to be used by the species.
- *None*: The survey corridor is clearly outside the species' currently known range, and vegetation communities, soils, and water quality conditions, etc., do not resemble those known to be used by the species.

Possible impacts to these species are evaluated based on reasonably foreseeable Project-related activities and the potential loss of habitat.

2.2.2 Aquatic Resources

The SWCA biologists conducted an aquatic resources inventory, which included identifying and recording wetlands and other waters that the USACE may determine to be WOTUS or state waters regulated by the CDPHE. WOTUS includes aquatic resources, such as rivers, creeks, streams, arroyos, lakes, and associated wetlands, that have the requisite relative permanence and connectivity to downstream navigable waters. State waters include any surface and subsurface waters that are contained in or flow through the state.

Under Section 404 of the CWA, wetlands are aquatic resources that “are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACE 1987). Other waters are generally identified and delineated by the presence of an ordinary high water mark (OHWM). An OHWM is the line on a shore established by fluctuations of water and is typically identified by physical characteristics, such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate signs that consider the characteristics of the surrounding areas.

2.2.2.1 WETLANDS

The presence or absence of wetlands is determined in the field via the use of delineation methods provided in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (Regional Supplement) (USACE 2010). Data at each potential wetland are recorded on Regional Supplement wetland determination data forms. Wetland boundaries are delineated where hydrophytic vegetation, hydric soils, and hydrology are present.

2.2.2.2 OTHER WATERS

The extent of other waters (e.g., creeks, rivers, arroyos, ponds, and constructed ditches) is determined in the field via the use of the guidance and methods provided in USACE *Regulatory Guidance Letter 05-05* (USACE 2005) and the USACE technical guidance in the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Final Version* (David et al. 2025).

3 RESULTS

3.1 Land Use and General Wildlife Habitat

USGS (2021) NLCD data indicate that the dominant land cover types within the survey corridor consist of developed open space (0.18 acre), developed high intensity (0.30 acre), developed low intensity (2.24 acres), developed medium intensity (12.76 acres), cultivated crops (24.60 acres), and grassland/herbaceous (78.67 acres). The primary land uses identified within the survey corridor and adjacent areas during the October 2025 field survey consist of open rangeland, grassland, and cultivated crops.

Dominant species found on-site included smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), kochia (*Bassia scoparia*), prickly Russian thistle (*Salsola tragus*), western wheatgrass (*Pascopyrum smithii*), and common mullein (*Verbascum thapsus*).

Additionally, two List C noxious weed species were observed within the survey corridor; these species consisted of field bindweed (*Convolvulus arvensis*) and cheatgrass (*Bromus tectorum*). List C noxious weeds are widespread throughout the state of Colorado and are not controlled at a state level; however, local governments can opt to control and regulate these species through the use of local ordinances (Colorado Department of Agriculture 2025).

3.2 Soils

According to NRCS soil survey data for Adams and Arapahoe Counties, Colorado, eight soil map units are present within the survey corridor (Table 1).

Table 1. Soil Map Units within the Survey Corridor

Soil Map Unit Symbol	Soil Map Unit Name	Prime Farmland	Hydric Rating	Acres in Survey Corridor*
AsB	Ascalon sandy loam, 0 to 3 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	No	7.29
AvC	Ascalon-Vona sandy loams, 1 to 5 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	No	2.95
NrB	Nunn-Bresser-Ascalon complex, 0 to 3 percent slopes	Prime farmland if irrigated	No	16.93
TrB	Truckton loamy sand, 0 to 3 percent slopes	Farmland of statewide importance	No	50.27
TrC	Truckton loamy sand, 3 to 5 percent slopes	NA	No	16.75
TtB	Truckton loamy sand, 0 to 3 percent slopes	Farmland of statewide importance	No	18.64
TtC	Truckton loamy sand, 3 to 5 percent slopes	NA	No	3.03
VnD	Vona loamy sand, 3 to 9 percent slopes	Not prime farmland	No	2.90
Total				118.76

Source: NRCS (2025)

* Acreage may vary due to rounding.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. Only a small percentage of the survey corridor was being actively farmed during the October 2025 field survey, this farmland was dryland and was not irrigated. None of the soil map units within the survey corridor have a hydric soil rating.

3.3 Wildlife Habitat and Special-Status Species

3.3.1 Federally and State-Listed Species

SWCA reviewed and analyzed the likelihood of federally listed and state-listed species to occur within the survey corridor. The federally listed species evaluated were based on the IPaC resource list of threatened, endangered, and candidate species that was generated for the survey corridor (USFWS 2025b). State species evaluated were based on the list of threatened, endangered, or state special concern species from the CODEX report that was generated for the survey corridor plus a 1-mile buffer (CNHP 2025).

In the state of Colorado, species of special concern are those that are listed by CPW due to a decline in population or habitat but are not listed as threatened or endangered. Species of special concern do not have Colorado statutory requirements; therefore, no regulatory implications are anticipated, and these species were not discussed further in this section or included in Table 2. If species of special concern are identified within the survey corridor, RMM should implement best management practices to minimize impacts to these species and associated habitats to the extent practicable.

The piping plover (*Charadrius melodus*) is listed as threatened, and the pallid sturgeon (*Scaphirhynchus albus*) is listed as endangered under the ESA. The USFWS IPaC resource list states that these species only need to be considered if the Project includes water-related activities and/or use in the North Platte, South Platte, or Laramie River Basins. The Project is not anticipated to include water-related activities, and no habitat was found within the survey corridor for these species. Additionally, the monarch butterfly (*Danaus plexippus*), a proposed threatened species, and the Suckley's cuckoo bumble bee (*Bombus suckleyi*), a proposed endangered species, are also on the IPaC resource list. No critical habitats intersect the survey corridor, and these species are unlikely to occur within the survey corridor. Other federally listed species on the USFWS IPaC resource list are included in Table 2 below; however, these species are unlikely to occur or have no potential to occur within the survey corridor due to the lack of suitable habitat within the survey corridor.

In addition to its federal status, the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) is designated as a state-threatened species and is listed in the CODEX report as a potential regulatory concern within the survey corridor. This species is listed by CODEX due to the intersection of the CPW overall range with the survey corridor (CNHP 2025). Similarly, the burrowing owl is also classified as a state-threatened species and is listed in the CODEX report, as the CPW breeding range for this species intersects the survey corridor (CNHP 2025). Table 2 lists the species identified by the IPaC list (USFWS 2025b) and CODEX report (CNHP 2025) and their potential to occur within the survey corridor.

Table 2. State-Listed and Federally Listed Special-Status Species and Their Potential to Occur Within the Survey Corridor

Common Name (scientific name)	Status*	Potential to Occur
Mammals		
Preble's meadow jumping mouse (<i>Zapus hudsonius preblei</i>)	FT, ST	Unlikely to occur. The survey corridor is within the CPW-mapped overall range of the species; however, the survey corridor lacks suitable habitat (e.g., riparian areas with dense shrubs, grass, and forb ground cover along creeks, rivers, and associated water bodies).
Birds		
Burrowing owl (<i>Athene cunicularia</i>)	ST	Unlikely to occur. The survey corridor is within the CPW-mapped breeding range for the species, but no prairie dog colonies or individuals were observed within the 660-foot buffer during the October 2025 field survey.
Piping plover (<i>Charadrius melodus</i>)	FT, ST	None. The survey corridor is outside the species' known range and lacks suitable habitat (along ocean and lakeshores). The species is a rare migrant in Colorado.
Whooping crane (<i>Grus americana</i>)	FE, SE	None. The survey corridor lacks suitable habitat (e.g., estuarine marshes, shallow bays, and tidal flats) and is outside the species' expected range.
Fish		
Pallid sturgeon (<i>Scaphirhynchus albus</i>)	FE	None. The survey corridor does not contain any flowing streams or viable habitat and is outside the species' expected range. This Project is not anticipated to include water-related activities.

Common Name (scientific name)	Status*	Potential to Occur
Insects		
Monarch butterfly (<i>Danaus plexippus</i>)	PFT	Unlikely to occur. Adult monarch butterflies lay eggs on milkweed plants, as that is the sole food source the caterpillars will eat. The survey corridor did not contain any milkweed (<i>Asclepias</i> spp).
Suckley's cuckoo bumble bee (<i>Bombus suckleyi</i>)	PFE	Unlikely to occur. This species uses the nests of other bumble bee species as habitat. No nests were observed within the survey corridor during the October 2025 field survey.
Plants		
Ute ladies'-tresses (<i>Spiranthes diluvialis</i>)	FT	Unlikely to occur. The survey corridor does not contain suitable habitat (e.g., seasonally flooded river terraces, sub irrigated or spring-fed abandoned stream channels and valleys, lakeshores, irrigation canals, berms, levees, irrigated meadows, gravel pits, barrow pits, reservoirs, and other human-impacted wetlands).
Western prairie fringed orchid (<i>Platanthera praeclara</i>)	FT	Unlikely to occur. The survey corridor does not contain suitable habitat (moist tallgrass prairies and sedge meadows).

Sources: CPW (2025); eBird (2021); USFWS (2025a)

* FE = federally endangered; FT = federally threatened; PFE = proposed federally endangered; PFT = proposed federally threatened; SE = state-endangered; ST = state-threatened

3.3.2 **Prairie Dogs**

The black-tailed prairie dog (*Cynomys ludovicianus*) is a burrowing mammal that typically inhabits short grass and mixed-grass prairies and desert grasslands. Black-tailed prairie dogs and their colonies are known to provide habitat for other special-status wildlife species, such as the mountain plover and western burrowing owl (*Athene cunicularia hypugaea*), and are prey for other special-status species, such as the golden eagle (*Aquila chrysaetos*) and ferruginous hawk (*Buteo regalis*). There were no prairie dog colonies found within the survey corridor or within the 660-foot buffer.

3.3.3 **Colorado Parks and Wildlife High Priority Habitat**

Colorado Senate Bill 19-181 requires oil and gas development and operations in Colorado to be regulated in ways that protect public health, safety, welfare, the environment, and wildlife resources. In response, the Colorado Energy and Carbon Management Commission (ECMC) completed a series of rulemakings in 2020 to implement the bill's requirements. As part of these efforts, the ECMC established the concept of HPH areas identified as especially important for wildlife conservation. HPH includes specific habitat areas mapped by CPW, which are detailed in Appendix VII of the ECMC's Rules.

The survey corridor does not intersect any CPW-mapped HPH; therefore, it is not anticipated to require coordination with CPW.

3.3.4 **Raptors and Migratory Birds**

The results of the desktop analysis indicated that no nests were previously mapped by CPW within the 0.5-mile raptor buffer. During the October 2025 field survey, no raptor nests were observed within the Project limits of disturbance. Two potential raptor nesting habitat areas were observed within the 0.5-mile raptor buffer. These potential raptor nesting habitat areas have been identified as RNH_01 and RNH_02 and parallel to I-70. No raptor nests were observed within the 0.5-mile raptor buffer; however, the survey was conducted outside of the nesting season for most raptors in Colorado (February 1–July 31). Additionally, visibility surrounding RNH_01 and RNH_02 was low due to dense foliage, and these locations were flagged as potential nesting habitat (Figure A-3, B-25, and B-26).

According to the CODEX report (CNHP 2025), the survey corridor is within the CPW-designated breeding range of the golden eagle; however, no individual bald eagles (*Haliaeetus leucocephalus*) or golden eagles were observed within the survey corridor or 0.5-mile raptor buffer.

The October 2025 field survey was conducted outside the migratory bird nesting season (April 1–August 31), and no migratory bird nests were found within the survey corridor. Under the MBTA, it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale any migratory bird or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued by USFWS.

Initial desktop review identified potential habitat for the mountain plover and long-billed curlew within the survey corridor; however no suitable habitat for these species was observed within the survey corridor during the October 2025 field survey. The survey corridor primarily consisted of disturbed and nonnative grasslands and a small percentage of actively managed agricultural areas. The areas lacked suitable habitat for mountain plovers and long-billed curlew.

3.4 Aquatic Resources

The survey corridor is within the Lost Creek Watershed (hydrologic unit code 1019000309). A review of Federal Emergency Management Agency (FEMA) data indicated that the survey corridor does not intersect any FEMA-mapped flood zones; however, just north of I-70 (outside of the survey corridor), a NHD-mapped flowline, West Sand Creek, is associated with a Zone A (floodplain), which is an area with a 1% annual chance of flooding (Figure A-4) (FEMA 2025). According to the existing data review, one NHD-mapped flowline and two NWI-mapped wetlands are within the survey corridor (USFWS 2025a; USGS 2023) (Table 3; see Figure A-3).

Table 3. NHD and NWI Features Mapped within the Survey Corridor

Aquatic Resource	Acres in Survey Corridor	Length in Survey Corridor (linear feet)	Feature Count
NHD Flowline			
Intermittent Stream/River	–	655.12	1
NWI Wetlands			
Other	0.339	–	1
Riverine	0.299	–	1

Sources: USFWS (2025a); USGS (2023)

3.4.1 Wetlands

No features meeting wetland criteria (i.e., presence of wetland hydrology, hydrophytic vegetation, and hydric soils) (USACE 1987) were observed within the survey corridor.

3.4.2 Other Waters

One isolated waterbody feature (OHWM01; 0.02 acre) that exhibited an OHWM was mapped within the survey corridor during the October 2025 field survey. The feature contained a high percentage of sand deposition, lower vegetation density, and scattered *Juncus* spp. within its boundary. Based on field observations and an analysis of historic and current aerial imagery, it appears that OHWM01 has likely developed within the historic channel boundary of West Sand Creek due to increased stormwater runoff from I-70. A large concrete box culvert was observed underneath of I-70, northwest of OHWM01. A

negative determination point was collected both up (NDP_02) and down gradient (NDP_01) from OHWM01 to document upland conditions within the historic boundary of West Sand Creek, which was dominated by upland vegetation and lacked any OHWM or wetland indicators. Data sheets for the negative determination points are included in Appendix C. This area will not be impacted by the proposed project.

4 SUMMARY AND CONCLUSION

Two SWCA biologists conducted a pedestrian field survey of the survey corridor on October 7, 2025. The survey was conducted to assess potential impacts to sensitive biological resources, including aquatic resources and special-status species, and assessed Project compliance with Section 404 of the CWA; CDPHE regulation, Discharges of Dredged and Fill Material into State Waters under House Bill 24-1379; the ESA; the MBTA; the Bald and Golden Eagle Protection Act as amended; and Colorado Revised Statute 33-2-105, which provides protections for state-listed threatened and endangered species.

USGS (2021) NLCD data indicate that the dominant land cover types within the survey corridor consist of developed open space (0.18 acre), developed high intensity (0.26 acre), developed low intensity (2.01 acres), developed medium intensity (10.4 acres), cultivated crops (19.49 acres), and grassland/herbaceous (75.95 acres). The primary land uses identified within the survey corridor and adjacent areas during the October 2025 field survey consist of open rangeland, grassland, and cultivated crops.

The survey corridor does not intersect any CPW-mapped HPH; therefore, it is not anticipated to require coordination with CPW.

No raptor nests were observed in the Project limits of disturbance. No raptor nests were observed within the 0.5-mile raptor buffer during the October 2025 field survey; however, visibility surrounding RNH_01 and RNH_02 was low due to dense foliage, and these locations were flagged as potential nesting habitat that could not be verified for the presence or absence of raptor nests due to visibility constraints (see Figure A-3). According to the CODEX report (CNHP 2025), the survey corridor is within the CPW-designated breeding range of the golden eagle; however, no individual bald eagles or golden eagles were observed within the survey corridor or 0.5-mile raptor buffer. No timing or spatial constraints are anticipated. If construction is proposed to occur within the nesting season for most raptors in Colorado (February 1–July 31), preconstruction raptor nest surveys are recommended due to the presence of potentially suitable habitat within the 0.5-mile buffer (CPW 2020). Additionally, if any active nests are encountered during construction, RMM should contact SWCA immediately.

The October 2025 field survey was conducted outside of the migratory bird nesting season (April 1–August 31), and no incidental passerine nests were found within the survey corridor. If construction is proposed to occur within the migratory bird ground-nesting season (April 1–August 31) (CPW 2023), preconstruction MBTA ground nest clearance surveys are recommended due to the presence of potentially suitable habitat within the survey corridor. Additionally, if any active nests are encountered during construction, RMM should contact SWCA immediately. Removal or disturbance of any active migratory bird nest requires consultation with the USFWS prior to disturbance.

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APPENDIX A

Maps

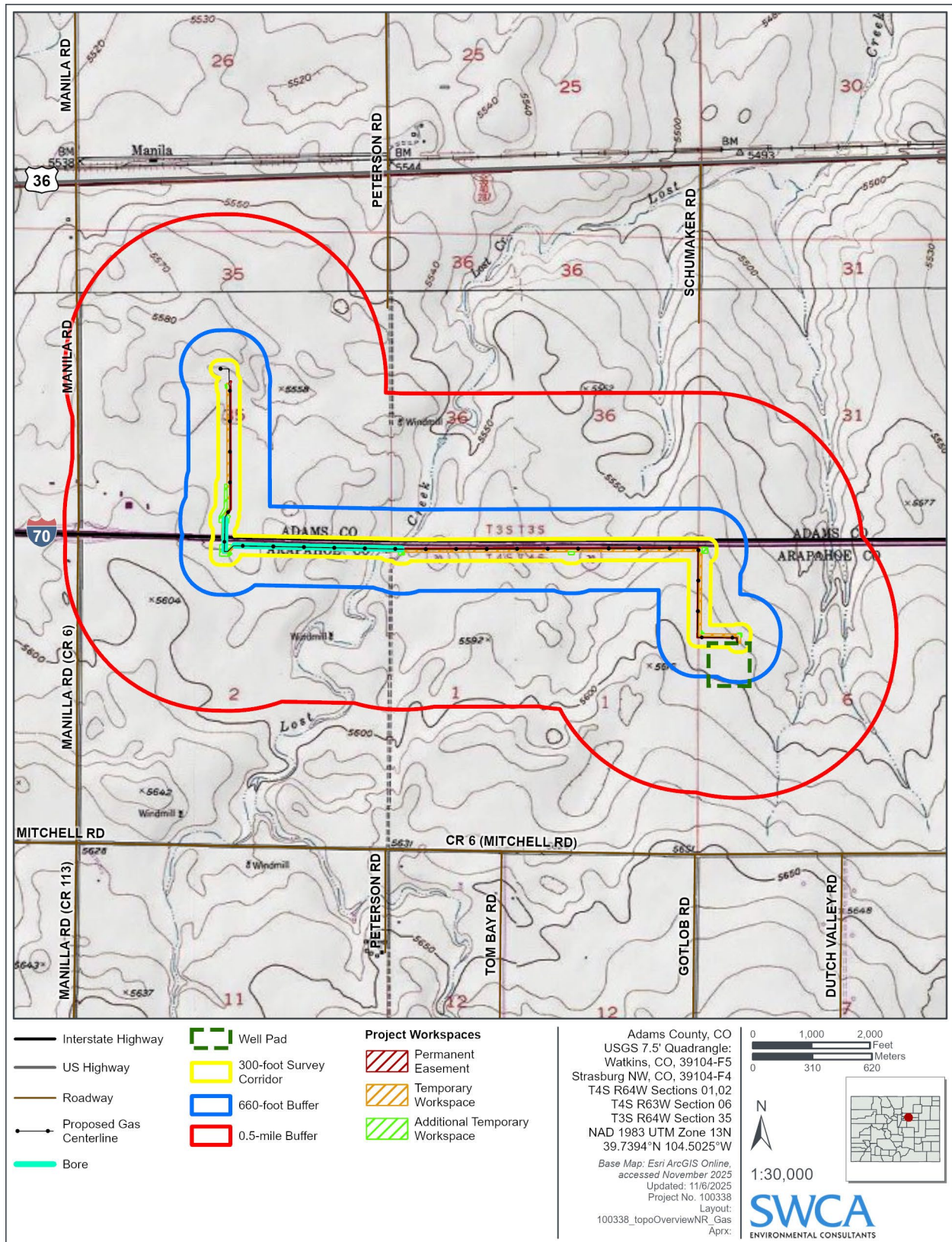


Figure A-1. Topographic overview of Project.

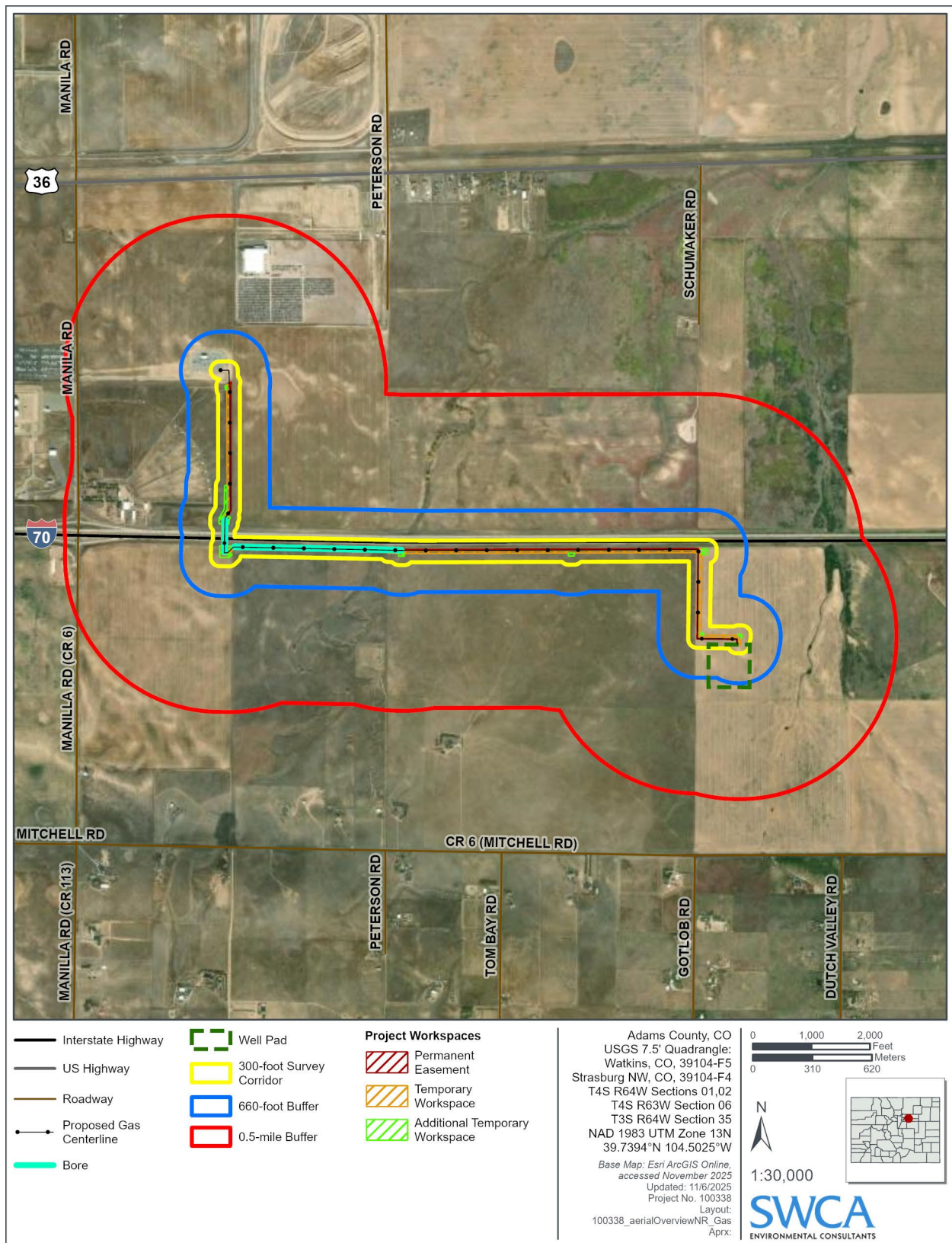


Figure A-2. Aerial overview of Project.

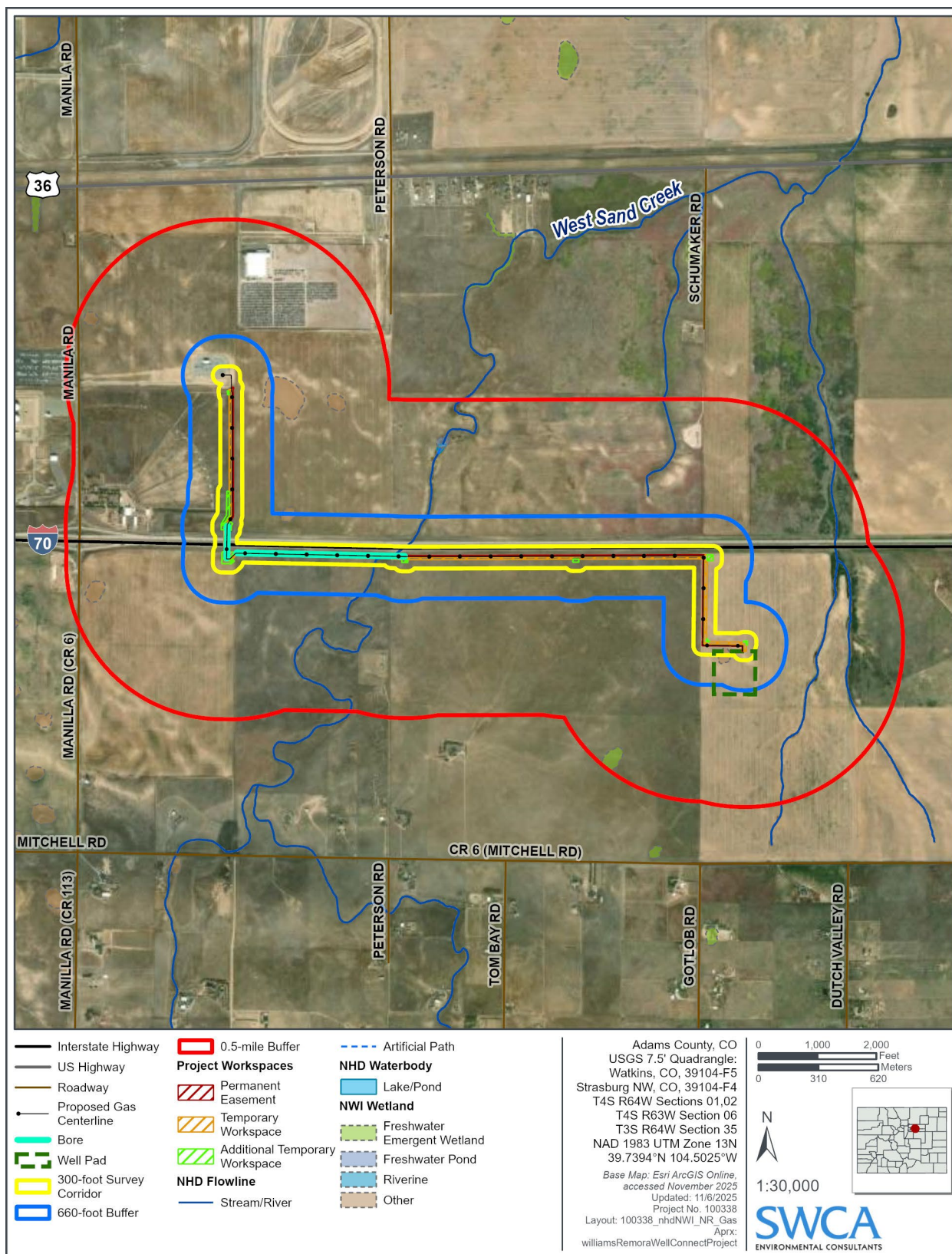


Figure A-3. NWI- and NHD-mapped desktop features.

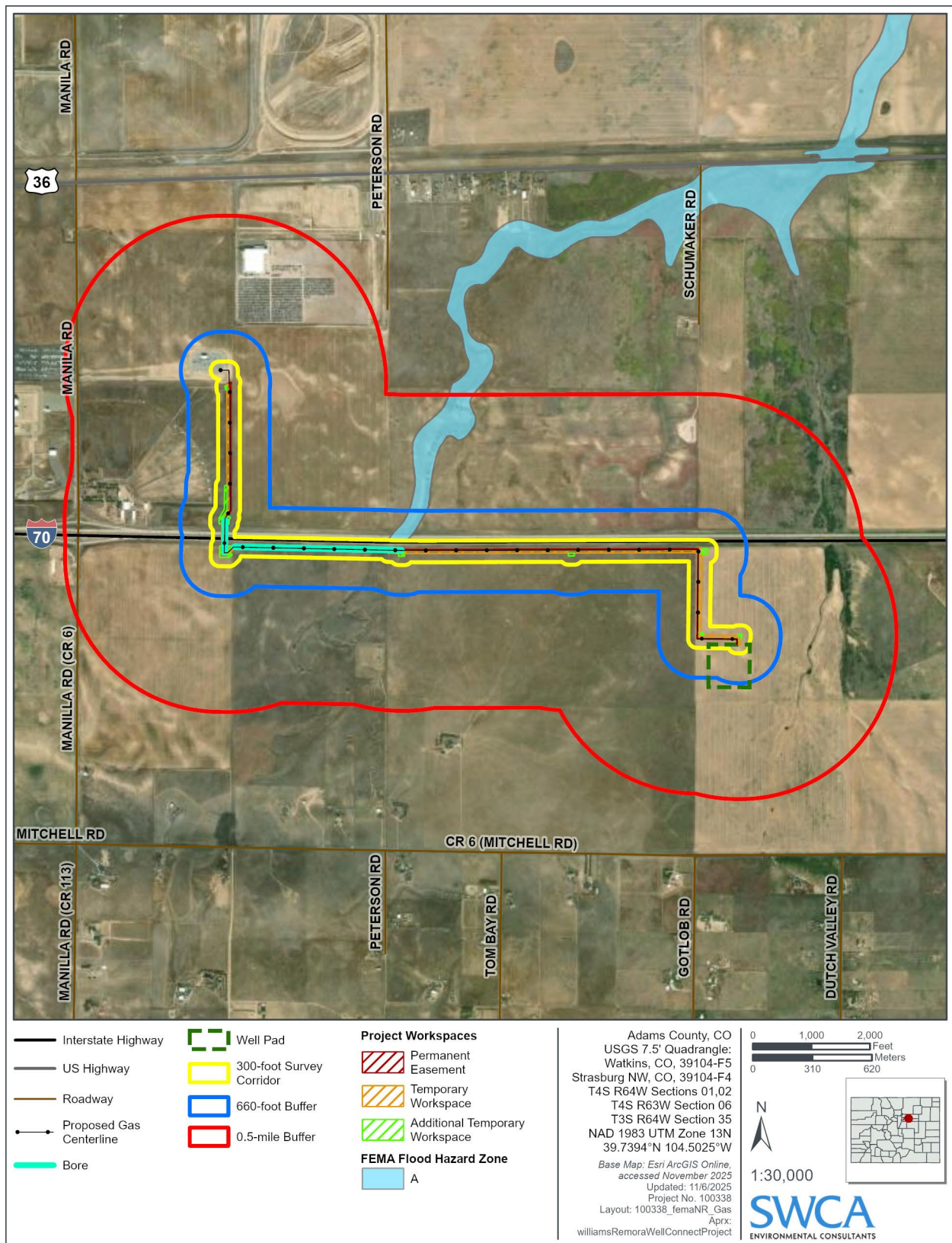


Figure A-4. FEMA-mapped flood hazard zones.

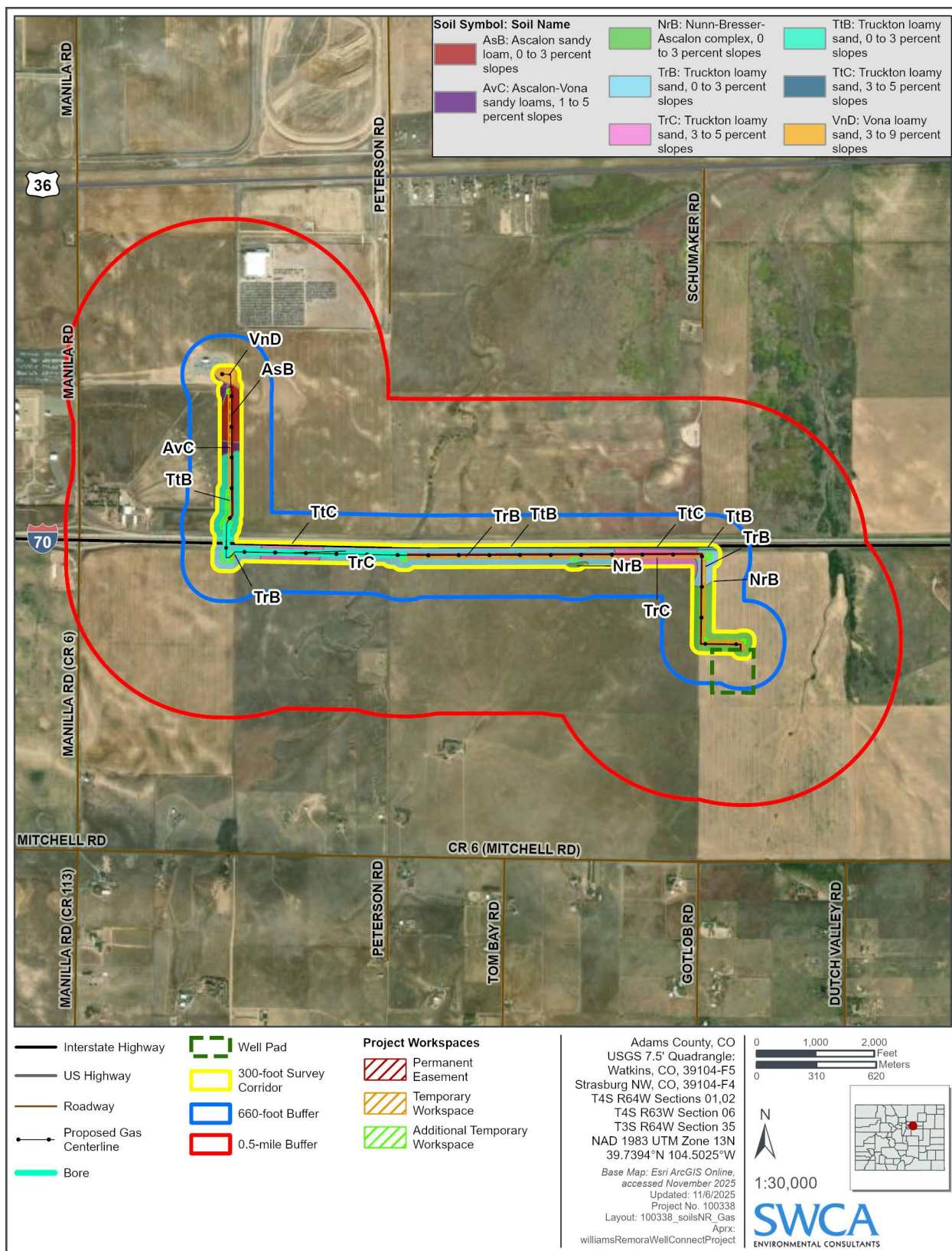


Figure A-5. Soil map units.

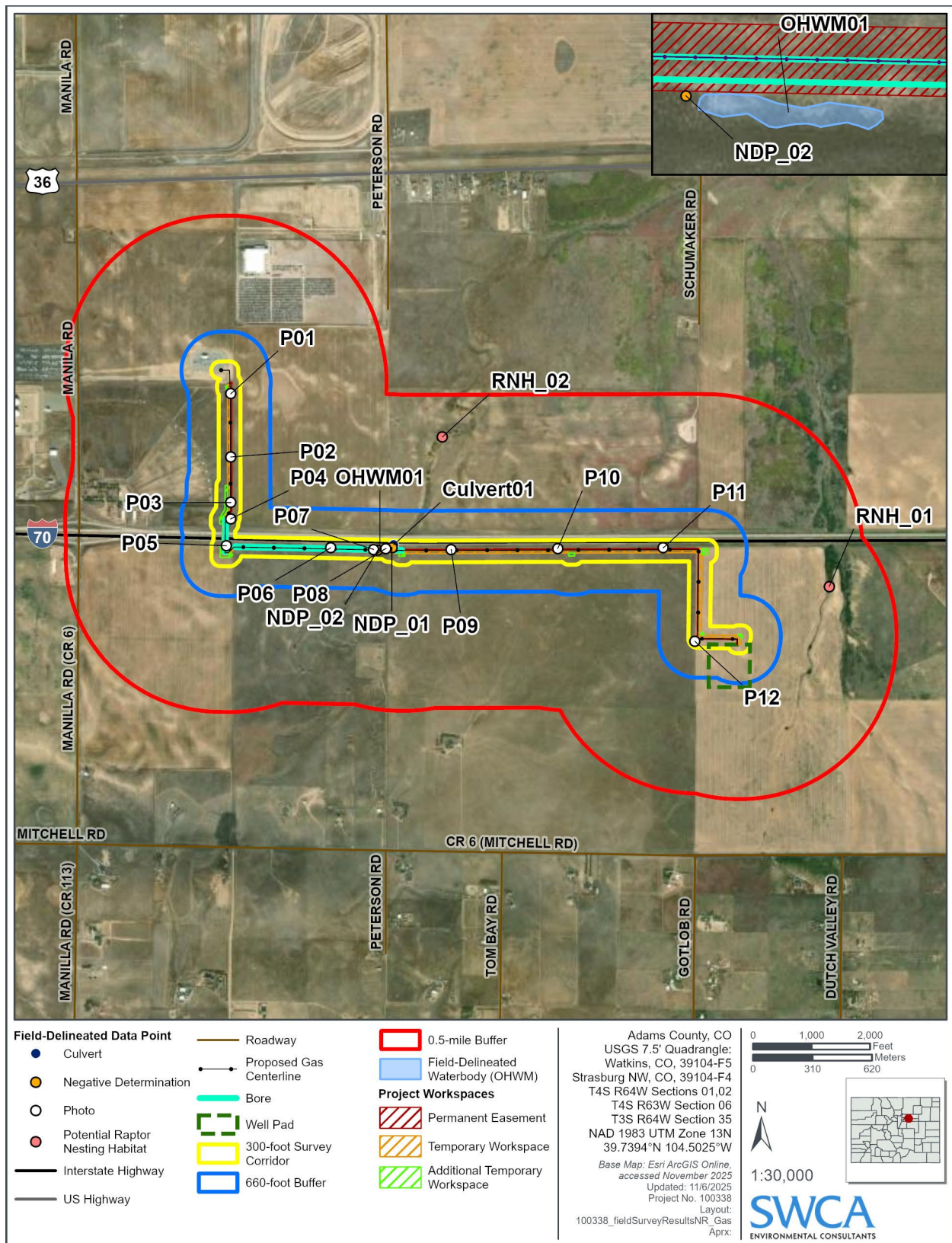


Figure A-6. Field survey results.

APPENDIX B

Site Photographs



Figure B-1. P01; view facing south.



Figure B-2. P02; view facing south.



Figure B-3. P03; view facing south.



Figure B-4. P04; view facing south.



Figure B-5. P05; view facing east.



Figure B-6. P06; view facing west.



Figure B-7. P07; view facing south.



Figure B-8. P08; view facing west.



Figure B-9. P09; view facing east.



Figure B-10. P10; view facing east.



Figure B-11. P11; view facing east.



Figure B-12. P12; view facing east.



Figure B-13. NDP_01; view facing north



Figure B-14. NDP_01; view facing east.



Figure B-15. NDP_01; view facing south.



Figure B-16. NDP_01; view facing west.



Figure B-17. NDP_01; soils.



Figure B-18. NDP_02; view facing north.



Figure B-19. NDP_02; view facing east.



Figure B-20. NDP_02; view facing south.



Figure B-21. NDP_02; view facing west.



Figure B-22. PP11; view facing east.



Figure B-23. OHWM01; view facing east.



Figure B-24. Culvert northeast of OHWM01; view facing northeast.



Figure B-25. Overview of RNH_01.



Figure B-26. Overview of RNH_02.

APPENDIX C

Data Sheets

WETLAND DETERMINATION DATA FORM — Great Plains Region

Project/Site: Williams Remora Well Connection City/County: Adams County Sampling Date: 10/07/2025

Applicant/Owner: Williams State: CO Sampling Point: NDP 01

Investigator(s): C.Walker Section, Township, Range: Sec. 01 T4S R64W

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR): LRR G Lat: 39.738271 Long: -104.507929 Datum: NAD 83

Soil Map Unit Name: TrB - Truckton loamy sand, 0 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: _____	No: <u> X </u>	Is the Sampled Area within a Wetland? Yes _____ No <u> X </u>
Hydric Soil Present?	Yes: _____	No: <u> X </u>	
Wetland Hydrology Present?	Yes: _____	No: <u> X </u>	
Remarks:			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum:</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (excluding FAC-): <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Domant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A/B)
1.				
2.				
3.				
4.				
	<u> 0 </u>	=Total Cover		
<u>Sapling/Shrub Stratum:</u> (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> 0 </u> x 1 = <u> 0 </u> FACW species <u> 0 </u> x 2 = <u> 0 </u> FAC species <u> 0 </u> x 3 = <u> 0 </u> FACU species <u> 40 </u> x 4 = <u> 160 </u> UPL species <u> 50 </u> x 5 = <u> 250 </u> Column Totals: <u> 90 </u> (A) <u> 410 </u> (B) Prevalence Index = B/A= <u> 4.56 </u>
1.				
2.				
3.				
4.				
	<u> 0 </u>	=Total Cover		
<u>Herb Stratum:</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ____ 1 - Rapid test for Hydrophytic Vegetation ____ 2 - Dominance Test is >50% ____ 3 - Prevalence Index is ≤3.0 ¹ ____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes ____ No <u>X</u>
1. <i>Bromus inermis</i>	<u> 50 </u>	<u>Y</u>	<u>UPL</u>	
2. <i>Glycyrrhiza lepidota</i>	<u> 15 </u>	<u>N</u>	<u>FACU</u>	
3. <i>Chenopodium album</i>	<u> 15 </u>	<u>N</u>	<u>FACU</u>	
4. <i>Pascopyrum smithii</i>	<u> 10 </u>	<u>N</u>	<u>FACU</u>	
5.				
6.				
7.				
8.				
9.				
10.				
	<u> 90 </u>	=Total Cover		
<u>Woody Vine Stratum:</u> (Plot size: <u>30'</u>)				
1.				
2.				
	<u> 0 </u>	=Total Cover		
% Bare Ground in Herb Stratum <u>10</u>				
Remarks:				

SOIL

Sampling Point: NDP_01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100		0	NA	NA	Loamy Sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Stratified Layers (A5) (LRR F) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) <input type="checkbox"/> High Plains Depressions (F16) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary indicators (minimum of one required: check all that apply)			Secondary indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where not tilled) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			

Field Observations: Surface Water Present? Yes ____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes ____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes ____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

WETLAND DETERMINATION DATA FORM — Great Plains Region

Project/Site: Williams Remora Well Connection City/County: Arapahoe Sampling Date: 10/07/2025

Applicant/Owner: Williams State: CO Sampling Point: NDP 02

Investigator(s): C.Walker Section, Township, Range: Sec. 02 T4S R64W

Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0-2%

Subregion (LRR): LRR G Lat: 39.738285 Long: -104.508793 Datum: NAD 83

Soil Map Unit Name: TrB - Truckton loamy sand, 0 to 3 percent slopes NWI classification: No

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: <u> </u>	No: <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes: <u> </u>	No: <u>X</u>		
Wetland Hydrology Present?	Yes: <u>X</u>	No: <u> </u>		
Remarks:				

VEGETATION - Use scientific names of plants.

Tree Stratum: (Plot size: <u>30'</u>)		Absolute % Cover <u> </u> <u> </u> <u> </u> <u> </u> <u>0</u> =Total Cover	Dominant Species? <u> </u> <u> </u> <u> </u> <u> </u> =Total Cover	Indicator Status <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (excluding FAC-): <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Domant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
Sapling/Shrub Stratum: (Plot size: <u>15'</u>)		<u> </u> <u> </u> <u> </u> <u> </u> <u>0</u> =Total Cover	<u> </u> <u> </u> <u> </u> <u> </u> <u>0</u> =Total Cover	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>55</u> (A)</td> <td><u>220</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A= <u>4.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>55</u> (A)	<u>220</u> (B)	Prevalence Index = B/A= <u>4.00</u>	
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Woody Vine Stratum: (Plot size: <u>30'</u>)		1. <u> </u> <u> </u> <u> </u> <u> </u> 2. <u> </u> <u> </u> <u> </u> <u> </u> <u>0</u> =Total Cover	<u> </u> <u> </u> <u> </u> <u> </u> <u>0</u> =Total Cover	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
% Bare Ground in Herb Stratum <u>45</u>																					
Remarks:																					

SOIL

Sampling Point: NDP_02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	2.5Y 7/3	100		0	NA	NA	Sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Stratified Layers (A5) (LRR F) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) <input type="checkbox"/> High Plains Depressions (F16) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary indicators (minimum of one required: check all that apply)			Secondary indicators (minimum of two required)		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where not tilled) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)			

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

Exhibit I
Development Agreement

DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT is made and entered into this ____ day _____, 2025, between **Rocky Mountain Midstream LLC**, a Texas limited liability company, qualified to do business in Colorado ("Developer"), whose address is 13781 Pacific Circle Mead, Colorado 80504 and the Board of County Commissioners of the **County of Adams**, State of Colorado ("County"), whose address is 4430 S. Adams County Parkway, Brighton, CO 80601 (the "Agreement").

WITNESSETH:

WHEREAS Developer desires to construct approximately 1.0 - 2.0 miles of 10 inch-diameter steel natural gas pipeline and associated appurtenances in Adams County, Colorado, as shown in the alignment sheets in Exhibit A ("Project"); more particularly described in that certain Conditional Use Permit ("CUP") Application dated _____, 2025; and

WHEREAS, on _____, 2025, Developer submitted an application for a CUP to Adams County in accordance with the requirements outlined in Chapter 2 of the Adams County Development Standards and Regulations ("Regulations"); and

WHEREAS, Developer will acquire, if it has not already done so, all necessary right-of-way easements and temporary construction easements to utilize certain real property in the County of Adams, State of Colorado; and

WHEREAS, the County has designated its future road expansion plans in the Adams County Transportation Plan adopted April 2022 ("Transportation Plan"); and

WHEREAS, the County and Developer have planned and designed the Project, so it will not prohibit future development, and so that it will not add cost to the County's future infrastructure plans to support development.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant, and agree as follows:

I. DEVELOPER'S OBLIGATIONS:

1. Pre-Construction Activities. Prior to site disturbance and commencing construction for the Project within the County, Developer shall:
 - a. Provide the County a summary of the permits necessary from all applicable jurisdictions for the construction and installation of the Project; the summary shall include the permit name, permit number (if applicable), date of application for permit, permit status (if not approved and the anticipated timing of such approval), and date of approval (if required for the subject permit).
 - b. Apply for the applicable construction permits for the Project.
 - c. Prepare a Storm Water Management Plan ("SWMP"). Storm Water Best Management Practices ("BMPs") will be implemented for the construction phase to capture and treat onsite Storm Water runoff in accordance with the requirements for the SWMP for the Project.

- d. Secure applicable local, state, and federal permits for the Project and submit copies of these permits to the County if, and to the extent, requested.
 - e. Secure Adams County Right-of-Way permits (if applicable) prior to constructing crossings for the Project.
 - f. Submit engineering plans for an approximately 30-foot-wide permanent easement plus up to an additional 40-foot-wide temporary easement for a total construction corridor of up to 70 feet in width to be designed and constructed in accordance with Chapter 7 of the Adams County Development Standards and Regulations.
2. Construction Activities. During construction, Developer shall:
- a. Construct the Project in accordance with the CUP.
 - b. Manage Stormwater in accordance with a SWMP prepared under the applicable provisions of the Colorado Department of Public Health and Environment ("CDPHE") Colorado Discharge Permitting System ("CDPS") Permit and Adams County's Grading Erosion and Sediment Control standards. BMPs will be implemented for the construction phase to capture and, if necessary, treat onsite Storm Water runoff in accordance with the applicable requirements for the SWMP.
 - c. Operate at the Project site only from 7:00 AM to 7:00 PM, Sunday through Saturday. Construction may occur outside the hours of 7:00 AM to 7:00 PM timeframe on an as-required basis, including but not limited to, during inclement weather, during hydrostatic testing, horizontal directional drilling ("HDD"), during other events or operations that require uninterrupted processes, and emergency situations that would cause Developer to be out of compliance with any applicable local, state, or federal permit. The County Director of Community and Economic Development may extend the hours and days of operation if Developer makes a request in writing and demonstrates sufficient need.
 - d. Comply with applicable guidelines of Section 106 of the National Historic Preservation Act of 1966 in locations that have been identified as federally regulated within the County. Comply with applicable provisions of the State of Colorado Historical, Paleontological, and Archeological Resources Act of 1973 (C.R.S. §§ 24-80- 401 to 410) on all identified state lands within the County. All best management practices and avoidance measures applicable within the approved CUP on lands that are state and federally regulated by the above listed laws will be enforced.
 - e. Comply with the terms of the applicable provisions of the Project's Air Pollution Emissions Notice ("APEN") issued by CDPHE, if an APEN is required.
 - f. Comply with C.R.S. § 42-4-1407, covering loads for all hauling/construction trucks.
 - g. If at any time roadways adjacent to the Project become dangerous or not passable due to debris or mud caused by Project activities, the Developer will promptly clear the roadway of any and all debris or mud caused by the Project activities. If the Developer fails to clean and remove debris from such roadways in a timely manner, Adams County Public Works Department has the option to perform the required clean up and bill clean up charges directly to the Developer.
 - h. Be responsible for repairing County infrastructure that is damaged as a result of the construction from the Project. Repairs shall occur as soon as reasonably possible, but no later than six (6) months following construction completion, unless extenuating circumstances prevent repair within the period of time. The Developer may submit evidence of the condition of the County's infrastructure at the start and completion of construction to

- demonstrate the pre-construction condition and the post-construction condition of the infrastructure.
- i. Remove and dispose of fluid spills caused by the project if applicable, such as hydraulic oil from maintenance of equipment, at a facility permitted for such disposal.
 - j. Communicate complaints Developer receives concerning material off-site impacts and the Developer's response to and/or actions taken to address or resolve those complaints to the Adams County Community and Economic Development Department. Developer will comply with all applicable noise and nuisance laws and regulations. Developer's failure to cure or address any ongoing or repeated violations of sound ordinances or other public disturbance laws or regulations after receiving notice thereof may lead to the County seeking a Show Cause Hearing before the Adams County Board of County Commissioners.
 - k. Ensure that construction vehicles have a backup alarm that complies with Occupational Safety and Health Administration requirements, 29 CFR 1926.601(b)(4) and 1926.602(a)(9), and/or other remedies (such as flagmen) to minimize noise as approved by the County.
 - l. Notify the County prior to commencing snow removal operations within the County's right-of-way. The Developer shall be responsible for damages to the right-of-way caused by these activities and shall repair damages at its expense within 60 days of receiving notice from the County.
 - m. Screen storage or staging areas from adjacent residential properties within 100 feet.
 - n. Comply with all applicable local, state, and federal requirements during the course of the Project.
 - o. Implement the following BMPs outlined in the Biological Resources Assessment:
 - i. Horizontal directional drilling shall be used to avoid impacts to wetlands and waterbodies to the extent reasonably practicable and in accordance with applicable U.S. Army Corps of Engineers requirements.
 - ii. Raptor and migratory bird surveys should be conducted by a qualified biologist prior to disturbance if work will occur within breeding season.
 - iii. If initial land disturbance is anticipated from March 15th to September 31st, a survey for potential burrowing owl habitat will be conducted. If potential habitat is found, surveys will be conducted in accordance with the Colorado Parks and Wildlife (CPW) protocols prior to the start of construction.
 - iv. If construction is planned to occur between April 1st to July 31st, field reconnaissance of potential mountain plover habitat should be conducted prior to disturbance.
 - v. In areas of trenching, a means of egress shall be provided for any wildlife that may enter the trench. Trenches should be checked for wildlife daily and if a species listed as Federal-or State-threatened or endangered is found or suspected, work should stop until consultation is completed with the applicable federal and/or state agency.
 - vi. Implement the following Adams County water well mitigation measures:
 - If trench dewatering is necessary, the water will be pumped and discharged to alluvial/colluvial sediments close to the stream channel.
 - If discharge of groundwater is necessary during construction, Developer agrees to obtain a discharge permit from CDPHE, Water Quality Control Division.
3. Design Requirements.
- a. The Project will be designed to meet or exceed the minimum safety standards contained the Colorado Energy & Carbon Management ("ECMC") Commission 1100 Series Rules, as applicable, and national engineering design codes for pipelines set forth by the American Society of Mechanical Engineers.

- b. Pipeline burial depths will meet or exceed federal, state, and applicable engineering standards. The pipelines will be buried with a minimum of 48-inches of cover where practical, with deviations permitted where engineering constraints or site conditions justify.
- c. Ensure the pipeline that is crossing county road crossings shall be as near as possible to right angles. This effective placement of the pipeline complies with required structure setbacks per 2022 Transportation Plan.

4. Operational Requirements.

- a. The Project will be operated in a way to meet or exceed the safety standards contained in the Colorado ECMC 1100 Series Rules.
- b. The Project will be operated in accordance with all applicable local, state, and federal codes, laws, and regulations, including but not limited to COOT and CDPHE.
- c. The Project will utilize an integrity management program that meets or exceeds the ECMC 1100 Series rules.

5. Post-Construction and Maintenance Requirements.

- a. Developer agrees to restore disturbed County-owned lands in compliance with the requirements of applicable easement agreements. Notwithstanding the above, if seeding is not permissible given the time of year the Developer agrees to seed as soon as possible. In the event that reseeded is unsuccessful in the first growing season, Developer agrees to comply with the terms of the easement agreements during the subsequent growing season. The County may grant an extension for good cause, in writing, in the event of unforeseen circumstances.
- b. Developer agrees to restore disturbed private property in accordance with the applicable easement agreements.
- c. The Developer agrees that the approval of encroachment agreement requests for parking lots and driveways on private property shall not be unreasonably or arbitrarily withheld, in accordance with the terms of the easement agreements for the Project, so long as such encroachment requests do not affect Developer's ability to safely operate, construct, maintain, and repair its pipeline.
- d. Developer agrees that it will not disrupt or damage the functionality of existing drainage facilities.
- e. Developer agrees to submit "as built" construction drawings to the Adams County Community and Economic Development Department and Public Works Department within 120 days of construction completion, or as soon thereafter as is reasonably practicable thereafter if Developer encounters delays, in accordance with the procedures established by the County.
- f. Developer agrees to submit emergency contact information, emergency response plans, and final maps of the Project, including associated pipeline components, to the local fire districts encompassing the Project and to the Adams County Office of Emergency Management before commencing operation of the pipeline. The Developer shall comply with other requests for information from the Adams County Office of Emergency Management in accordance with local, state, and federal law.
- g. Maintenance of the Project will follow guidelines set forth in Developer's operations and maintenance procedures, which meet or exceed regulatory requirements. Maintenance activities associated with the pipeline and permanent easement including the following:
 - i. Implement a damage prevention program, including observation of any construction activities by others on or near the permanent easement;

- ii. Participate in the State of Colorado's one-call program and responding to one-calls;
- iii. Install and maintain pipeline markers;
- iv. Inspect isolation valves;
- v. Inspect crossings by other pipelines, highways, railroads, and utilities;
- vi. Inspect and maintain safety, control, mechanical, and electrical equipment;
- vii. Maintain communication equipment.

6. Development Impact Fees. There are no development impact fees associated with this Project.
7. Guarantee of Compliance. Developer hereby agrees that, should it fail to comply with the terms of this Agreement through no fault of Adams County, a force majeure event, or some other cause outside the reasonable control of Developer, the County may seek to obtain from the Colorado State District Court for the Seventeenth Judicial District a mandatory injunction requiring said Developer to comply with the terms of this Agreement. Prior to the County seeking such an injunction, Developer will be provided 30 days following written notice thereof, or, if acting in a commercially reasonable manner the Developer cannot cure such within 30 days of such notice, such period that is reasonably necessary to cure any default in accordance with the terms set forth herein. Developer further agrees that failing to comply with the material requirements set forth in this Agreement may be justification for a Show Cause Hearing where the CUP Permit may be revoked.
8. Successors and Assigns. The rights granted herein may be assigned in whole or in part, and the terms, conditions, and provisions of this Agreement shall be deemed a covenant running with the real property in perpetuity and shall be binding upon the heirs, executors, personal representatives, successors, and assigns of Developer and of the County.

II. COUNTY'S OBLIGATIONS:

Except as expressly set forth herein, the County shall have no obligations associated with this Agreement.

III. GENERAL PROVISIONS:

1. No Third-Party Beneficiaries. This Agreement is intended to describe and determine such rights and responsibilities only as between the Parties hereto. It is not intended to and shall not be deemed to confer rights or responsibilities to any person or entities not named hereto.
2. Notices. Any and all notices, demands or other communications desired or required to be given under any provision of this Agreement shall be given in writing and delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid or by email address as follows:

To Developer:
Rocky Mountain Midstream, LLC
Attn: Blaine Pritchett
13781 Pacific Circle
Mead, CO 80542

To Adams County:
Director, Adams County Community and Economic Development
4430 South Adams County Parkway
1st Floor, Suite W2000A
Brighton, CO 80601

With a copy to:
Adams County Attorney
4430 South Adams County Parkway
5th Floor, Suite CS00B
Brighton, CO 80601

3. Amendments. Should any changes to the CUP be proposed by Developer before, during or after completion of the Project, Developer shall submit the details of those changes to the Adams County Community and Economic Development Director for a determination as to whether those changes constitute a Major or Minor Amendment in accordance with the Regulations.

This Agreement may only be modified amended, changed, or terminated in whole or in part by a separate agreement in writing duly authorized and executed by the Parties hereto with the same formality, and subject to the same statutory and regulatory requirement, as this Agreement.

4. Controlling Law. This Agreement and its application shall be construed in an accordance with the laws of the State of Colorado.
5. Default. If either party is in default under this Agreement, the non-defaulting party shall provide written notice to said defaulting party at the address provided in Section 2 immediately above, the defaulting party shall have 30 days, or such longer period that is reasonably necessary if the default is not reasonably curable within 30 days, to cure the default. The non-defaulting party may seek all remedies available pursuant to the Agreement and under the law.
6. Costs and Fees. In the event of any litigation arising out of this Agreement, the parties agree that each party will pay its own costs and fees.

DEVELOPER

Rocky Mountain Midstream, LLC
a Texas limited liability company

By: _____
Name
Title

ACKNOWLEDGMENT

STATE OF COLORADO)
) SS.
COUNTY OF XXXX)

The foregoing instrument was acknowledged before me this _____ day of _____,
2025, by _____ for Rocky Mountain Midstream, LLC.

Witness my hand and official seal.

Notary Public
State of XXXX

APPROVED BY RESOLUTION at the meeting of _____, 2025.

ATTEST:

BOARD OF COUNTY COMMISSIONERS
ADAMS COUNTY, COLORADO

Clerk of the Board

Chair

Exhibit J
Emergency Response Plan



Rocky Mountain Midstream - Pipelines & Gathering Systems

ERP

Plan Last Revised: 11/07/2024

Developed by:



JENSEN HUGHES

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Emergency Response Plan

Company employees are not trained first responders and are only trained to recognize an emergency event, initiate emergency shutdown (if necessary), evacuate to a safe location and notify local 911. All Company employees complete annual emergency response training and have a basic Incident Command System (ICS) understanding. Company employees will be considered Subject Matter Experts (SMEs) on Company assets and facilities when working in Unified Command with external response agencies.

Rocky Mountain Midstream - Pipelines & Gathering Systems

Geographic Location	
Physical Address:	
City, State, Zip:	,
County/Parish:	
Latitude/Longitude:	/

Scope		
Asset Name	Location	Description

Description
While responding to an Emergency Event at a Rocky Mountain Midstream Asset you may encounter: Natural Gas, Natural Gas Liquids, Ethane, Methanol, Glycol, Engine Oil, Aerosols, Nitrogen, Crude Oil, etc. This list is not all inclusive. <u>Please ensure you contact a Williams Representative before entering the site.</u>

Area Office Information	
Phone Number:	
Office Address:	13781 Pacific Circle Mead, CO 80504

1.0 REPORTING AND NOTIFICATION

Upon recognition of an Emergency Event:

1.0 Reporting and Notification
Employee:
1.1 Activate local alarm system if not already activated.
1.2 Summon Emergency Response Agencies (ERAs) listed in the table below. Immediately contact: <ul style="list-style-type: none">• 911• Security Operations Center• Pipeline Control Make additional notifications in the order most appropriate for the emergency event.
1.3 Notify the Required Contacts (Area Manager, Supervisor, etc.) listed in the table below.
1.4 Notify Additional Contacts as needed.
NOTE: Due to the vast locations of the pipeline systems across three counties the best number to call is 911 in the event of an emergency.

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES

* 24-hour number

IMMEDIATE NOTIFICATIONS		CALLED
Immediate Notifications		
Williams SOC (Onshore Spill Reporting or Bomb Threat)	855-945-5762* (Emergency)	<input type="checkbox"/>
Williams Media Hotline	800-945-8723* (Emergency) Media@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES, CONTINUED

* 24-hour number

911 OR WELD COUNTY REGIONAL COMMUNICATIONS 1-970-350-9600		CALLED
Agency or Individual		
Emergency Management	911* (Emergency)	<input type="checkbox"/>
Sheriff/Police Dept.	911* (Emergency)	<input type="checkbox"/>
Fire Department	911* (Emergency)	<input type="checkbox"/>
Ambulance/EMT	911* (Emergency)	<input type="checkbox"/>

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES, CONTINUED

* 24-hour number

COUNTY/PARISH NAME PSAP/ECC – 911 (10-DIGIT ALTERNATE PHONE#)		CALLED
COUNTY/PARISH NAME PSAP/ECC - 911 (10-digit alternate phone#)		
Weld County Communications Center	970-350-9600 (Office)	<input type="checkbox"/>

TABLE 1.2 - REQUIRED CONTACTS (INTERNAL)

* 24-hour number

REQUIRED CONTACTS (INTERNAL)		CALLED
Company Personnel		
Pipeline Safety Hotline	877-614-7183 (Office)	<input type="checkbox"/>
Kody Denny Supv Operations	970-230-2658 (Office) 970-230-2658 (Mobile) KodyDenny@williams.com (Email)	<input type="checkbox"/>
Sam Tippey Supv Operations	970-502-4255* Sam.Tippey@Williams.com (Email)	<input type="checkbox"/>
29 CFR 1910.120 HAZWOPER Q/IC Training		
Devin Tibljas Mgr Operations Sr	918-284-1208 (Office) 918-284-1208 (Mobile) Devin.Tibljas@williams.com (Email)	<input type="checkbox"/>
Kenneth Meritt Safety Specialist IV, Williams	303-548-6739* (Mobile) 970-381-7705* (Home) kenneth.meritt@williams.com (Email)	<input type="checkbox"/>
Scott Alexander Supv Operations	720-202-8659 (Office) 720-202-8659 (Mobile) Scott.Alexander@Williams.com (Email)	<input type="checkbox"/>
Thomas Vanbibber Operations Tech Senior, Williams	417-827-4061* (Mobile)	<input type="checkbox"/>
Mick Blackwell Supv Operations	303-870-0909 (Office) 303-870-0909 (Mobile) Mick.Blackwell@williams.com (Email)	<input type="checkbox"/>
Jonathan Torizzo Environmental Specialist IV	303-775-5382 (Office) 303-775-5382 (Mobile) Jonathan.Torizzo@Williams.com (Email)	<input type="checkbox"/>
United States		
Cailin Harrington Engineer II	918-232-4240 918-232-4240 Cailin.Harrington@Williams.com (Email)	<input type="checkbox"/>
Kevin Crawford Operations Technician Lead	303-880-5281 (Office) 303-880-5281 (Mobile) Kevin.Crawford@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.2 - REQUIRED CONTACTS (INTERNAL), CONTINUED

* 24-hour number

REQUIRED CONTACTS (INTERNAL), CONTINUED		CALLED
Company Personnel, Continued		
Alexander Ban Operations Technician Sr	303-880-0636 (Office) 303-880-0636 (Mobile) AlexBan@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.3 - OIL SPILL REMOVAL ORGANIZATIONS (OSROS)

* 24-hour number

OIL SPILL REMOVAL ORGANIZATIONS (OSROS)	
USCG CLASSIFIED OSRO	
Forefront Emergency Management, LP Lakeway, TX	844-427-7767 (Office)

TABLE 1.4 - ADDITIONAL CONTACTS (EXTERNAL)

* 24-hour number

ADDITIONAL CONTACTS (EXTERNAL)		CALLED
Offshore Releases and Spills		
O'Brien's Oil Pollution Services (OOPS)	985-781-0804	<input type="checkbox"/>

2.0 AVAILABLE RESOURCES

Resource	Location	Company Name & Phone Number (if 3rd Party Contractor)
Hazardous Gas Detectors	Compressor Stations and associated buildings	
First Aid Supplies	Compressor Stations & Company Vehicles	
Notification Lists	Plant Control Room & Company Vehicles	
Maps of the Area	Plant Control Room & Company Vehicles	
P&IDs of the facility/process	Paper copies and online system	
Cell Phones	Plant Control Room and select personnel	
Portable Fire Extinguishers	Company Vehicles & Various Locations	
Stoppole Equipment		Contractor: T.D. Williamson, 1-918-447-5000
Pick-up Trucks (4WD and 1-ton), Rubber Tire Backhoe, Track Hoe, Air and Gas Trash Pumps, Vacuum Units, Vacuum Trucks, Semi-Tractors, Low-boy Trailers, Gas Monitors, Welding Rigs, Boom Trucks, PPE, Pipe Repair Clamps and Sleeves		Contractor 1888 Energy Services Contact Rocky Allen (970)518-8133
OSRO - Spill/Emergency Management Team Services, PREP Compliance, extended OSRO network		Contractor (Retainer) Forefront Emergency Management, LP 2802 Flintlock Trace, Ste B104 Lakeway, TX 844-427-7767 78738

3.0 RESPONSE ACTIONS

3.1 EVACUATION

3.1 Evacuation
Some Employees may delay evacuation until critical functions have been performed (e.g., closing valves, etc.) as long as it does not jeopardize the Employee's safety.
If an Employee feels they are in danger, they should evacuate immediately.
Employee:
3.1.1 Do not start vehicles or other combustible engine powered equipment, as these can be an ignition source.
3.1.2 Shut down equipment only if it can be done from a safe distance and is safe to do so.
3.1.3 Observe wind direction, walk to the nearest exit, and proceed to the designated gathering point.
3.1.4 Take the following items if safe to do so: <ul style="list-style-type: none"> • 4-Gas Monitor • Handheld radios • Facility satellite phone (if applicable) • Company cell phones • Visitor Logbook or sign in app • Emergency Response Plan • Portable First Aid Kit/AED
3.1.5 When the evacuation is complete, account for all personnel before proceeding: <ul style="list-style-type: none"> • Determine if anyone is missing. <ul style="list-style-type: none"> • Attempt to contact the missing person. • Conduct a perimeter check, if necessary and it's safe to do so. • Determine if rescue is needed: <ul style="list-style-type: none"> • Contact Police/Fire/EMS/Sheriff as necessary.
In the case of failure of pipeline system transporting a highly volatile liquid, use of appropriate instruments (some listed in 3.1.4) to assess the extent and coverage of the vapor cloud and determine the hazardous areas. Keep personnel and the public out of areas determined to be hazardous and isolate and deny access or entry in accordance with section 3.5.

3.2 ESTABLISH INCIDENT COMMAND (ICS)

3.2 Establish Incident Command (ICS)	
<input type="checkbox"/>	Employee:
<input type="checkbox"/>	3.2.1 If first on site:
<input type="checkbox"/>	Establish the Incident Command System (ICS) and:
<input type="checkbox"/>	<ul style="list-style-type: none"> • Appoint a Safety Officer.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Determine the location of the Incident Command Post.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Once qualified responders arrive, transition Incident Command to the appropriate agency.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Integrate into the Unified Command.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Establish reliable communication methods between individuals who will play an active role in the response.

3.3 ESTABLISH UNIFIED COMMAND

3.3 Establish Unified Command	
<input type="checkbox"/>	Employee:
<input type="checkbox"/>	3.3.1
<input type="checkbox"/>	<ul style="list-style-type: none"> • Meet Responders at a safe location and brief on situation.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Form Unified Command with First Responders and discuss objectives: <ul style="list-style-type: none"> • Do not permit entry unless scene is stable and approved by Williams. • Plan for personnel safety, scene stabilization, public safety, and site control (consider law enforcement if needed). • Determine the most effective communication method that will be used between agencies. • Determine how accountability will be kept once permission to enter the facility or site has been granted by Williams Leadership.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Stage emergency equipment. Consider hazards, atmospheric conditions and locations where blowdowns may need to occur.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Do not speak to the media, the Fire Chief and an appointed Williams Representative will fill the responsibility should it become necessary.

3.4 RESPONDING TO AN INCIDENT AT A REMOTE SITE

3.4 Responding to an Incident at a Remote Site	
Employee (First on Scene):	
3.4.1 Observe and evaluate the general conditions.	
3.4.2 Do not perform mitigation actions until qualified responding personnel arrive on scene.	
3.4.3 Establish Incident Command described in steps above.	

3.5 ISOLATE AND DENY ACCESS OR ENTRY

3.5 Isolate and Deny Access or Entry	
Employee:	
3.5.1 Working with Emergency Response Agencies:	<ul style="list-style-type: none"> Isolate the scene of the emergency event. Establish perimeter controls to keep persons out of any potentially hazardous areas. <ul style="list-style-type: none"> For Onshore Assets <ul style="list-style-type: none"> Do not use Company vehicles to block public roadways. Work with law enforcement and first responders if roadways will need to be shut down. Assist in establishing Hot (Red), Warm (Yellow), and Cold (Green) zones. Take actions to protect personnel and the affected public.
3.5.2 Identify and remove ignition sources (e.g., pilot lights, engines, motors, etc.) only if it does not put individuals at risk.	
3.5.3 Take actions, according to site-specific procedures, to confine and control the release. Do not take any action unless properly trained to perform the task and in a safe location.	

3.6 MEDICAL/FIRST AID

3.6 Medical/First Aid	
<input type="checkbox"/> Employee:	
<input type="checkbox"/> 3.6.1 Provide First Aid and CPR, up to level of ability, training, and personal comfort. Any treatment beyond First Aid or CPR will be performed by trained professionals.	
<input type="checkbox"/> 3.6.2	<ul style="list-style-type: none"> If safe to do so, retrieve necessary equipment. <ul style="list-style-type: none"> AED's are in office locations. First aid and bloodborne pathogen kits are in the office areas, control rooms and trucks.
<input type="checkbox"/>	<ul style="list-style-type: none"> <u>Check</u> the area for hazards before entering the scene. Do not place yourself in danger when trying to help someone. <ul style="list-style-type: none"> If the area is safe, check the victims.
<input type="checkbox"/>	<ul style="list-style-type: none"> <u>Call</u> or have someone call 911 and make appropriate notifications. <ul style="list-style-type: none"> If possible, have someone meet the emergency responders at a main entrance, main road or helipad (Offshore) to escort them to the victim's location.
<input type="checkbox"/>	<ul style="list-style-type: none"> <u>Care</u> for the victim. <ul style="list-style-type: none"> Only administer care up to the level of your training. If the victim is conscious, ask for consent. If the victim is unconscious or too ill to reply, consent is implied. Always wear required PPE for the task.
<input type="checkbox"/> Incident Commander:	
<input type="checkbox"/> 3.6.3 Report all injuries and exposures.	

3.7 SHUT-DOWNS OR PRESSURE REDUCTIONS

3.7 Shut-Downs or Pressure Reductions
Employee:
3.7.1 Perform emergency shutdown, pressure reduction, and venting of the affected asset to minimize hazards to life or property. Follow site-specific procedures.

3.8 IDENTIFY HAZARDOUS MATERIALS

3.8 Identify Hazardous Materials
Employee:
3.8.1 Identify any hazardous materials that have been spilled or released.
3.8.3 Use appropriate PPE for the situation.
3.8.2 Use Safety Data Sheets (SDS) or the NAERG to identify risks associated with spilled or released hazardous materials: <ul style="list-style-type: none">• <u>Safety Data Sheets</u>• MSDSonline/Velocity EHS (phone): 888-362-2007• Or, Local Chemical Management System

3.9 NATURAL DISASTERS

All Disasters

- If the event causes spills, fires, or explosion:
 - Initiate the Emergency Plan.

Preparedness Kit

- Develop a preparedness kit, as appropriate for local condition.
- Consider obtaining the following items to be stored in a pre-designated location, known to all personnel that are assigned to the site.
- The items should be stored in containers that are easily identifiable, portable, and stored in a cool, dry location:
 - First-aid kit
 - Paper and pencils
 - Non-sparking wrench or pliers
 - Flashlight
 - Cell phone, with charger
 - Hand-held 2-way radio
 - Extra batteries for each of the items listed above
 - Cleaning items (garbage bags, moist towelettes, soap (body and hand), cleaning solutions)
 - Plastic sheeting
 - Duct tape
 - Fire extinguisher
 - Construction tools (for post-incident use)
 - Leather gloves
 - Hard hats
 - Lumber for shoring
 - Saws - for clearing debris
 - Whistles/air horns

During/After the Event

- Notifications:
 - If applicable, report event to
 - Security Operations Center (SOC) - 855-945-5762
 - Pipeline Control - 918-573-7108
 - If the facility has any change to normal operations, the Area Operations Manager will notify:
 - Immediate chain of command
 - Area Operations Supervisor
 - Pipeline Operations Control
 - Notifications should also be made to Volume Control and appropriate support groups of the **facility's temporary operational status due to the weather conditions.**

Post Incident Actions

- Re-entry:
 - Re-entry into the area will be authorized only after approval by:
 - LEPC
 - Local authorities
 - Area Operations Supervisor
 - The all-clear will be required for all emergencies prior to re-entry and will be based on situations in the field.
- Recovery:
 - When restoring service and returning to normal operations:
 - Follow appropriate Site-Specific Operating Procedures and Pipeline Control Procedures
 - For repair and/or startup of physical assets, refer to 09.00.00.02 – Pre-Startup Safety Review (PSSR). Use MSLive/Livelink and Accounting inventories to restore facility records.
 - Public Drives are backed-up using Williams IT Security systems.
 - The Area Operations Supervisor will notify the SOC and Pipeline Control of the estimated timeline for resuming operations at the site.

Tornado

TORNADO
<p>Williams RMM: Tornado</p> <p>• Approaching tornado should be anticipated. Williams Employees will monitor the potential hazardous weather on weather apps, the internet (consider using: https://www.weather.gov/bgm/), an emergency radio (where available), television, or other</p>

means of communications whenever storms are possible. Appropriate action should be taken to protect oneself.

- Seek shelter within site control room or vehicles with a hard metal top and sides. Do not seek shelter in small, unprotected buildings, sheds, tents, compressor buildings, electrical buildings (MCC) or temporary shelters. Generally, all installed gathering, processing, and compression equipment is grounded but is NOT considered safe to work on equipment or shelter in place within in a compressor or MCC building during lightning events
- From Primary Control Center, sound the emergency siren and activate strobe light, if applicable.
- Account for all personnel on duty.
- Direct all non-essential personnel to the facility control room to sign out and leave the facility to seek shelter in an unaffected area. (This assumes that there is advanced warning and leaving would be a safe action).
- Shutdown all truck loading/unloading activities.
- Begin isolating all non-essential equipment.
- Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown. Contact pipeline control if necessary.
- Consider shutting down the facility through normal shutdown procedures. If there are time constraints or unsafe conditions (hail, lightning), use ESD.
- Notify Pipeline Control of plan to ESD Facility 918-573-7408
- ESD Facility (Operators discretion).
- While completing the above steps, remain alert for signs of an approaching tornado such as funnel formations on or near the ground, a dark (often greenish) sky, large hail, or a loud roar like a freight train.
- Take shelter.
- If a tornado or other weather-related event does pass through the area, report to the appropriate muster point as listed in the ERP. This is to be done only after the weather emergency has passed and it is safe to be in the open.
- If necessary, implement the Emergency Response Plan for any damage that has occurred because of a tornado or other severe weather-related event such as spills, fires, explosions, downed power lines, etc.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Provisions for supplies of necessities for those sheltered in place:

Tornado shelter not stocked; used for temporary occupancy only.

If Shelter is not available, check path of travel and move vehicle in a safe path of travel.

Emergency Response Kits are in most of the assigned company vehicles.

First aid kits, eyewash stations or eyewash bottles, and Automated Emergency Defibrillators are in all control rooms. In addition, first aid kits and fire extinguishers are maintained in all company vehicles.

The incident commander is responsible for distribution of emergency supplies when an emergency warrants. The inventory coordinator and SOAs will maintain the emergency water/food supplies and the Safety Officer will manage the emergency equipment maintenance.

Tornado, Continued

TORNADO, CONTINUED
Employee:
<p>Monitoring:</p> <p>Monitor for potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App; <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. ■ Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ NOAA emergency radio. ◦ Wireless Emergency Alerts (WEAs): <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alert authorities that can broadcast from cell towers to any WEA-enabled mobile device in a local targeted area. ◦ Television. ◦ Other means of communications.
<p>Preparedness:</p> <ul style="list-style-type: none"> • Identify location of on-site storm shelter or safe room/area. <ul style="list-style-type: none"> ◦ Refer to OSHA's Tornado Preparedness and Response website for guidance. ◦ An underground area, such as a basement or storm cellar, provides the best protection from a tornado. ◦ Provide signage for designated area, as needed. • If an underground shelter is unavailable, consider the following: <ul style="list-style-type: none"> ◦ Seek a small interior room or hallway on the lowest floor possible. ◦ Utilize rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead. ◦ Stay away from doors, windows, or outside walls. ◦ Stay in the center of the room, and avoid corners because they attract debris. • Identify locations where personnel should NOT seek shelter during this type of emergency (i.e. vehicles, pipe racks, portable buildings, etc). <ul style="list-style-type: none"> ◦ Avoid auditoriums, cafeterias, and gymnasiums that have flat, wide-span roofs.

Tornado, Continued

TORNADO, CONTINUED
Employee, Continued
List designated safe areas at the site:
Provide signage, as needed, to indicate the location of safe rooms/areas.
<p>Tornado Weather Definitions:</p> <ul style="list-style-type: none"> • Tornado Watch: <ul style="list-style-type: none"> ◦ Tornadoes are possible in and near your area. Be ready to act fast! ◦ During these storms, heavy rains, lightning, flash flooding and hail are possible. • Tornado Warning: <ul style="list-style-type: none"> ◦ TAKE IMMEDIATE ACTION! A tornado is near. There is danger. ◦ Move to a safe location right away. ◦ You may have only minutes or seconds to take shelter.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Limit driving to critical operations in potential tornado weather conditions. <ul style="list-style-type: none"> ◦ If driving is required, plan the safest route. • Take preliminary action to secure the facility before the weather deteriorates. <ul style="list-style-type: none"> ◦ Consider possible projectiles: <ul style="list-style-type: none"> ■ Unsecured doors (swinging or overhead) ■ Tools, containers, etc. ◦ Shutdown the facility per operating procedures by trained and competent personnel. ◦ Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown. ◦ Contact pipeline control, if necessary.
<p>If tornado sirens are activated in the area:</p> <ul style="list-style-type: none"> • Seek shelter immediately. • Evaluate weather warnings. • Immediately notify all on-site personnel of an actual tornado or a watch/warning. • Assign person to obtain site roster to enable quick accountability of all personnel following the emergency.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • If advance notification allows: <ul style="list-style-type: none"> ◦ From Primary Control Center, sound the emergency siren and activate strobe light, if applicable. ◦ Ensure a current knowledge of all personnel (employees, contractors, others) on site at the station or at remote sites to account for all personnel after the event subsides. • When personnel become aware of a tornado: <ul style="list-style-type: none"> ◦ If inside a building: <ul style="list-style-type: none"> ■ Move to an identified safe room/area if time allows. ■ If there is no designated room/area or there is no time to get there: <ul style="list-style-type: none"> ■ Move to an interior room on the lowest level of the building. ■ Stay away from outside walls, doors and windows. ◦ If outside: <ul style="list-style-type: none"> ■ If possible, immediately get to a sturdy building. ■ If it is not possible to reach a building, get to a low, flat area. ■ Do NOT get under an overpass or bridge, or in a culvert. ■ Lie down on your stomach and cover your head and neck. ■ Consider using any available PPE for added protection. ◦ If in a vehicle: <ul style="list-style-type: none"> ■ If possible, immediately get to sturdy building. ■ Do NOT get under an overpass, bridge, or in a culvert. ■ Put on a seatbelt and cover your head and neck. • When safe to do so, update the Area Operations Supervisor, Operations Manager, Local Safety Representative and Pipeline Gas Control of impending weather or weather effects on personnel, facilities, or operations.

Tornado, Continued

TORNADO, CONTINUED	
Employee:, Continued	
After the storm passes:	
<ul style="list-style-type: none">• Account for all personnel that were on-site during the storm.• Remain aware of and stay clear of potential hazards.<ul style="list-style-type: none">◦ Stay clear of impacted structures until evaluated for safety.◦ Exposed power or utility lines.◦ Hazardous materials (fumes, liquids, hissing sounds).◦ Debris.◦ Water sources - maybe contaminated. water lines maybe compromised or weakened.◦ Roadways and bridges maybe impassable.• If trapped due to debris:<ul style="list-style-type: none">◦ Avoid breathing dust or fumes. Cover your mouth with a cloth, mask or your hand.◦ Try to attract attention by making a call/text, banging on a pipe or wall, or using a whistle or shouting.	
Assign specific personnel to inspect systems for damage and report any damage to Primary Control Center.	

Severe Storm

SEVERE STORM

Williams RMM

Severe Storm with Damaging Winds

In the event that the NWS issues a Tornado Warning or a Severe Thunderstorm Warning with damaging winds for the immediate area, or warnings are issued for an adjacent county and the projected path includes the immediate area, these are steps to follow for the following facility at Conway: <https://www.weather.gov/bgm/>,

- From Control Room, sound the emergency siren and activate strobe light.
- Account for all personnel on duty.
- Direct all non-essential personnel to the facility control room to sign out and leave the facility to seek shelter in an unaffected area. (This assumes that there is advanced warning and leaving would be a safe action).
- Shutdown all truck loading/unloading activities.
- Begin isolating all non-essential equipment.
- Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown.
- Consider shutting down the facility through normal shutdown procedures. If there are time constraints or unsafe conditions (hail, lightning), use ESD.
- Notify Pipeline Control of plan to ESD Facility. 918-573-7408
- ESD Facility (Operators discretion).
- While completing the above steps, remain alert for signs of an approaching tornado such as funnel formations on or near the ground, a dark (often greenish) sky, large hail, or a loud roar like a freight train.
- Take shelter.
- If a tornado or other weather-related event does pass through the area, report to the appropriate muster point as listed in the ERP. This is to be done only after the weather emergency has passed and it is safe to be in the open.
- If necessary, implement the Emergency Response Plan for any damage that has occurred because of a tornado or other severe weather-related event such as spills, fires, explosions, downed power lines, etc.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Thunderstorms are dangerous storms with lightning. A lightning strike can be fatal. Thunderstorms often bring powerful winds that can knock down trees, power lines, and mobile homes, intense rainfall that causes flash floods, tornadoes, lightning strikes that can spark fires, as well as damaging hail.

Severe Storm, Continued

SEVERE STORM, CONTINUED
Employee:
<p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App: <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ Wireless Emergency Alerts (WEAs); <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. ◦ NOAA emergency radio ◦ Television ◦ Other means of communications
<p>Severe Weather Definitions:</p> <ul style="list-style-type: none"> • Severe Thunderstorm Watch: <ul style="list-style-type: none"> ◦ Indicates the atmosphere is favorable for the development of severe thunderstorms. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio or television for information. • Severe Thunderstorm Warning: <ul style="list-style-type: none"> ◦ Issued when severe weather has been reported by spotters or indicated by radar. ◦ Warnings indicate imminent danger to life and property to those in the path of the storm.
<p>Severe Weather Hazards:</p> <ul style="list-style-type: none"> • Electrocutation <ul style="list-style-type: none"> ◦ Death caused by electric shock, like a lightning strike. • Power Surge <ul style="list-style-type: none"> ◦ A spike, or huge quick increase, in the amount of electricity coming through a power line.
<p>Preparedness:</p> <ul style="list-style-type: none"> • Where personnel or contractors are expected to be stationed during a severe weather event, consider availability of: <ul style="list-style-type: none"> ◦ Food - canned goods (with can opener) and perishable goods ◦ Water ◦ Warm, dry clothing/blankets ◦ Cots/bedding/sleeping bags

Severe Storm, Continued

SEVERE STORM, CONTINUED
Employee; Continued
<p>Pre-Event Actions – Equipment</p> <ul style="list-style-type: none"> • Generally, all installed pipeline and compression equipment is grounded and protected from the effects of severe weather and lightning. • Take preliminary action to secure all facilities before the weather deteriorates. Identify and secure any materials that may become projectiles. • Consider whether to have generators on standby to be used at Meter Stations or remote facilities. • Top-off all portable fuel cans. • Verify availability of tools and portable lighting. • Consider whether to have portable equipment on stand-by. • Make sure vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ◦ Top off fuel ◦ Top off windshield washing fluid ◦ Jumper cables ◦ First aid kit ◦ Dry, warm clothes/blanket ◦ Emergency food and water ◦ Emergency flares/lights/strobes ◦ Operable radio or cell phone (with appropriate charger) • Place generators on standby or proactively operate in case of a power outage. • Close all valves on product and additive storage tanks, if appropriate. • Top-off all portable fuel cans. • If lightning is expected: Unplug appliances and other delicate electronics.
<p>Area Operations Supervisor/Manager Actions:</p> <ul style="list-style-type: none"> • Evaluate severe weather warnings. • Instruct employees (to include temporary and contractors) to delay travel or leave early as needed. • Ensure a current knowledge of all personnel (including temporary and contractors) on site at the station or at remote sites in order to account for all personnel after the event subsides. • Provide additional guidance as necessary.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Postpone outdoor activities if the forecast calls for thunderstorms. • Shelter in place. • ESD and blow down equipment when requested by local authorities.

Severe Storm, Continued**SEVERE STORM, CONTINUED****Employee; Continued**

General Instructions for Personnel:

- When thunder is heard:
 - Seek shelter inside a secure building and move to a basement or an interior room on the lowest floor.
 - Stay away from glass windows and doors.
 - Stay inside until weather forecasts indicate it is safe to leave.
 - While Compressor buildings are grounded, they are not appropriate shelters in event of severe weather. All work must stop and personnel report to a safe location.
 - Use the 10/30 lightning safety rule: Using a Lightning Strike app on a computer or cellular phone (WeatherBug or weather.gov), identify when lightning is within 10 miles of the location.
 - If a lightning strike occurs within a 10-mile radius of the work location, cease all outdoor activities immediately and direct all employees to a safe location.
 - Do not resume work for a minimum of 30 minutes. If another strike occurs within a 10-mile radius within the 30-minute wait period, then the 30-minute clock re-starts.
- Lightning can be dangerous even inside a building.
 - Avoid using devices connected to electrical outlets or landline phones.
 - Avoid running water. Lightning can travel through plumbing and water lines.
- Remember, no place outside is safe when thunderstorms are in the area. If you are caught outside in a thunderstorm, keep moving toward a safe shelter.
- Never take shelter under a tree; this is the leading cause of death from lightning strikes. You could also be killed or injured by strong winds blowing down trees and branches.
- Limit driving to critical operations in serious weather conditions. If driving is required, employees should plan the safest route.
- Being in a vehicle is safer than being outside; however, if you have time, drive to the closest sturdy building, and take shelter inside.
- If driving and unable to get to a sturdy building:
 - Pull off the road and park in a location away from trees and power lines.
- Flash flooding happens quickly. Move to higher ground before floodwaters reach you.
 - Never walk, swim, or drive through floodwater. Turn Around! Don't Drown!
- DO NOT attempt to fight a fire beyond the incipient stage.

Severe Storm, Continued

SEVERE STORM, CONTINUED	
Employee; Continued	
Post-Event Actions:	
<ul style="list-style-type: none">• Watch for fallen power lines and trees.• Be aware that damaged trees and limbs may continue to fall after the storm is over.	

Flooding

FLOODING

Williams RMM

Flooding due to Heavy Rain

Control room operators will monitor the situation on the emergency radio, NOAA weather radios, and/or television whenever flooding is possible. If flooding is imminent: <https://www.weather.gov/bgm/>,

- Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762
- Establish an evacuation plan and routes if roads are covered with standing water DO NOT Proceed.
- Take preliminary action to secure the facility before it floods. Emergency actions.
- Consider whether to obtain portable pumps and hoses from local suppliers or from other MCFS locations in the area.
- Keep at least a normal bottom in all above ground tanks, more if possible.
- Plug all rack drains and facility drains connected to the sump, if safe to do so.
- Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks, if safe to do so.
- Shut down high-voltage power and block in natural gas, if safe to do so.
- Close all valves on product and additive storage tanks, if safe
- Before evacuation, know where all the employees will be residing and obtain phone numbers so that they can be contacted should additional emergencies occur.
- Initiate Emergency Response Plan if the flood causes spills, fires, or explosions.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Flooding is a temporary overflow of water onto land that is normally dry. Floods are the most common natural disaster in the United States. Failing to evacuate flooded areas or entering flood waters can lead to injury or death.

Floods may result from rain, snow, coastal storms, storm surges and overflows of dams and other water systems. They may develop slowly or quickly. Flash floods can come with no warning. Floods may cause outages, disrupt transportation, damage buildings, and create landslides.

Flooding, Continued

FLOODING, CONTINUED
Employee:
<p>Monitoring: Determine the likelihood of flooding by determining whether the site lies within a floodplain. Refer to FEMA Flood Map Service Center.</p> <p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App: The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. • Wireless Emergency Alerts (WEAs): WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. • NOAA emergency radio • Television • Other means of communications
<p>Flood Weather Definitions:</p> <ul style="list-style-type: none"> • Flood Advisory: <ul style="list-style-type: none"> ◦ Be Aware. A Flood Advisory is issued when a specific weather event that is forecast to occur may become a nuisance. A Flood Advisory is issued when flooding is not expected to be bad enough to issue a warning. However, it may cause significant inconvenience, and if caution is not exercised, it could lead to a situation that may threaten life and/or property. Typically issued for the possibility of Minor Flooding. • Flood Watch: <ul style="list-style-type: none"> ◦ Be Prepared. A Flood Watch is issued when conditions are favorable for a specific hazardous weather event to occur. A Flood Watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is possible. • Flood Warning: <ul style="list-style-type: none"> ◦ Take Action! A Flood Warning is issued when the hazardous weather event is imminent or already happening. A Flood Warning is issued when flooding is imminent or occurring. Typically issued for the possibility of Moderate or Major Flooding. • Flash Flood Warning: <ul style="list-style-type: none"> ◦ Take Action! A Flash Flood Warning is issued when a flash flood is imminent or occurring. If you are in a flood prone area move immediately to high ground. A flash flood is a sudden violent flood that can take from minutes to hours to develop. It is even possible to experience a flash flood in areas not immediately receiving rain. • Stage: <ul style="list-style-type: none"> ◦ The level of the water surface of a river or stream above an established gage datum at a given location. • Flood Stage <ul style="list-style-type: none"> ◦ An established gage height for a given location above which a rise in water surface level begins to create a hazard to lives, property, or commerce. The issuance of flood advisories or warning is linked to flood stage. • Turn Around, Don't Drown®: <ul style="list-style-type: none"> ◦ Each year, more deaths occur due to flooding than from any other thunderstorm related hazard, half of which result occurring when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths is due to walking into or near flood waters. People underestimate the force and power of water. Never drive around the barriers blocking a flooded road. The road may have collapsed under that water. A mere 6 inches of fast-moving flood water can knock over an adult. It takes just 12 inches of rushing water to carry away most cars and just 2 feet of rushing water can carry away SUVs and trucks. It is NEVER safe to drive or walk into flood waters.
<p>NOTE: The definitions listed are used by the National Weather Service. Other jurisdictions may use other terminology for these same conditions.</p>

Flooding, Continued

FLOODING, CONTINUED
Employee; Continued
<p>Flood Hazards:</p> <ul style="list-style-type: none"> • Coastal flooding: <ul style="list-style-type: none"> ◦ Generally occurs with a land-falling or near-land system such as a Tropical Storm or Hurricane. Storm surge and large waves produced by hurricanes pose the greatest threat to life and property along the coast. The destructive power of storm surge and large battering waves can result in loss of life; destruction of buildings; erosion of beaches and dunes; and damage to roads and bridges along the coast. Storm surges undermine building foundations by constant agitation of the water piled high by the tropical cyclone. The result can be a complete demolition of homes and businesses. Storm surge can also travel several miles inland causing additional flooding and destruction. • River flooding: <ul style="list-style-type: none"> ◦ Occurs when river levels rise and overflow their banks or the edges of their main channel and inundate areas that are normally dry. The NWS issues Flood Warnings for designated River Forecast Points where flood stage has been established. Local jurisdictions may use differing terminology. River flooding is classified as follows: <ul style="list-style-type: none"> ■ Minor – Means that low-lying areas adjacent to the stream or river, mainly rural areas and farmland and secondary roadways near the river flood. ■ Moderate – Means water levels rise high enough to impact homes and businesses near the river and some evacuations may be needed. Larger roads and highways may also be impacted. ■ Major – Means that extensive rural and/or urban flooding is expected. Towns may become isolated and major traffic routes may be flooded. Evacuation of numerous homes and businesses may be required. ■ Record – Means that the water reaches a level higher than it has ever been recorded before. It can cause extensive damage or even no damage or other negative impacts. • Burn Scars/Debris Flows: <ul style="list-style-type: none"> ◦ In areas where wildfires have occurred, vegetation may have burned away and soil properties altered, leaving behind bare ground that tends to repel water. This is called a burn scar, and as rain falls over it, the ground is unable to absorb the water. It either collects or runs off to the lowest point. Without vegetation to hold the soil in place, flooding can produce mud and debris flows. When normally dry soil becomes overly saturated, it can even reach the point where it turns to a liquid state and flows downhill, essentially becoming a river of mud, which can destroy buildings, wash out bridges and roadways and knock down trees. • Ice/Debris Jams: <ul style="list-style-type: none"> ◦ In rivers, as ice or debris moves downstream, it may get caught on any obstruction to the water flow. When this occurs, water can be held back, causing upstream flooding. When the jam finally breaks, flash flooding can occur downstream.

Flooding, Continued

FLOODING, CONTINUED
Employee:, Continued
<p>Preparedness:</p> <ul style="list-style-type: none"> Consider availability of all items listed in the Preparedness Kit, but with specific emphasis on: <ul style="list-style-type: none"> Food - canned goods (with can opener) and perishable goods Water Dry, warm clothing/blankets Cots/bedding/sleeping bags
<p>Consider Pre-Event Actions:</p> <ul style="list-style-type: none"> Take preliminary action to secure all facilities before the weather deteriorates. Assess the presence of any materials on-site that may be displaced by rising water levels (timber mats, skids, work equipment, etc). Inspect drainage facilities to ensure no blockage or flow restrictions. Consider whether to have sandbags brought to site. Consider whether to obtain portable pumps and hoses from local suppliers or from other locations in the area. Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks. Inspect secondary containment components for any potential releases. Shut all valves if not in use. Evaluate shutdown of high-voltage power and block in natural gas per operating procedures and by trained and competent personnel. Place generators on standby or proactively operate in case of a power outage. Close all valves on product and additive storage tanks, if appropriate. Top-off all portable fuel cans. Determine the need to have portable equipment on stand-by. Remove or secure assets such as files, computers, and spare parts, if safe to do so. Attach a buoy with valve number marking to each valve with 25 ft. of rope to all crossovers and block valves. Coordinate with Emergency Responders on pipeline location and condition. Provide maps and other relevant information to such responders. Coordinate with other pipeline operators in the flood area and establish emergency response centers to act as a liaison for pipeline problems and solutions. Deploy employees so that they will be in a position to take emergency actions, such as shutdown, isolation, or containment.

Flooding, Continued

FLOODING, CONTINUED
Employee; Continued
<p>Area Operations Supervisor/Manager Actions:</p> <ul style="list-style-type: none"> • Evaluate weather warnings. • Schedule personnel to be stationed at critical facilities in preparation for severe weather as needed. <ul style="list-style-type: none"> ◦ Distribute emergency food and water to areas where personnel will be stationed. • Instruct Employees (to include temporary and Contractors) to delay travel or leave early as needed, as well as the following considerations. <ul style="list-style-type: none"> ◦ Be aware of the location of all personnel (employees, contractors, others) on site at the station or at remote sites to account for all personnel after the event subsides. ◦ Prior to evacuation: <ul style="list-style-type: none"> ■ Know where all the employees will be residing and obtain phone numbers so that they can be contacted if additional emergencies occur.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Evacuation: <ul style="list-style-type: none"> ◦ Learn and practice evacuation routes, shelter plans, and flash flood response. ◦ If possible, go to the designated safe location. If told to evacuate, do so immediately. ◦ Never drive around barricades. Local responders use them to safely direct traffic out of flooded areas. ◦ Do not walk, swim, or drive through flood waters. <ul style="list-style-type: none"> ■ Turn Around, Don't Drown®. Just six inches of fast-moving water can knock you down, and one foot of moving water can sweep your vehicle away. ◦ Stay off bridges over fast-moving water. Fast-moving water can wash bridges away without warning. ◦ If your vehicle is trapped in rapidly moving water, stay inside. If water is rising inside the vehicle, seek refuge on the roof. • Shelter in Place: <ul style="list-style-type: none"> ◦ If the site is above the expected flood stage with lower lying areas surrounding, it may be safe to shelter in place, especially for flash flood events. ◦ If trapped in a building, go to its highest level. <ul style="list-style-type: none"> ■ Do not climb into a closed attic. You may become trapped by rising floodwater. ■ Go on the roof only if necessary. Signal for help.

Flooding, Continued

FLOODING, CONTINUED
Employee, Continued
<p>During Event - Actions to Consider:</p> <ul style="list-style-type: none"> • Always put generators outside well away from doors, windows and vents. • Determine the operability of all company vehicles. • Limit driving to critical operations during and immediately after a flood event. • Evaluate the accessibility of pipeline facilities that may be in jeopardy, such as valve settings, which are needed to isolate water crossings or other sections of a pipeline. • Determine if facilities that are normally above ground (e.g. valves, regulators, relief stations, etc.) have become submerged and are in danger of being struck by vessels or debris; if possible, such facilities should be marked with an appropriate buoy with Coast Guard approval. • Keep at least a normal bottom in all above ground tanks, more if possible. • Perform frequent patrols, including appropriate overflights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. • Determine if flooding has exposed or undermined pipelines because of new river channels cut by the flooding or by erosion or scouring.
<p>Post Event - Actions to Consider:</p> <ul style="list-style-type: none"> • If patrols and depth surveys indicate the existence of a hazard to normal land use activities. <ul style="list-style-type: none"> ◦ Share information with affected landowners. • Make sure line markers are still in place or replaced in a timely manner. • Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover. • If a pipeline has suffered damage, is shut-in, or is being operated at a reduced pressure as a precautionary measure because of flooding: <ul style="list-style-type: none"> ◦ Refer to 07.16.01.07 - DOT Regulatory Reporting Requirements. • Inspect riverbank and area between river and valve setting for damaged ROW or exposed pipe. • Fully inspect and service valve operators and valves per manufacturer's recommendations. • Determine if any underground storage tank (UST) systems have become displaced or damaged and release their contents into the environment, causing soil, surface water, and groundwater contamination. • Pressure wash valve settings and inspect coatings. • Replace locks that may be damaged by water. • Inspect and repair fencing as needed. • Secure site assets to prevent theft or vandalism.

Flooding, Continued

FLOODING, CONTINUED
Employee; Continued
<p>General Instruction for Personnel:</p> <ul style="list-style-type: none"> • Avoid contact with flood water due to potentially elevated levels of contamination associated with raw sewage and other hazardous or toxic substances that maybe in the flood water. • Avoid or limit direct contact with contaminated flood water. • Wash hands frequently with soap, especially before drinking and eating. • Boiling water: <ul style="list-style-type: none"> ◦ To kill all major water-borne bacterial pathogens, bring water to a rolling boil for 1 full minute. • Mold cleanup: <ul style="list-style-type: none"> ◦ Mold can cause serious health problems. The key to mold control is moisture control. ◦ After the flood, remove standing water and dry indoor areas. Remove and discard anything that has been wet for more than 24-48 hours. • Mosquitos can sharply increase after a flood. <ul style="list-style-type: none"> ◦ As flood waters recede be sure to drain, overturn, or empty areas – no matter how small – to reduce mosquito breeding areas and help reduce the spread of mosquito-borne diseases. • Be aware that snakes and other animals may be in a building. Wear heavy gloves and boots during clean up. Avoid wading in floodwater, which can contain dangerous debris and be contaminated. Underground or downed power lines can also electrically charge the water. • If needed, use a generator equipped with GFCI or other propane or gasoline-powered machinery ONLY outdoors and away from windows. • Be aware of the risk of electrocution. Do not touch electrical equipment if it is wet or if you are standing in water. <ul style="list-style-type: none"> ◦ If it is safe to do so, turn off the electricity to prevent electric shock.

Winter Weather

WINTER WEATHER
Employee:
<p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. ■ Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ Wireless Emergency Alerts (WEAs): <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. ◦ NOAA emergency radio ◦ Television ◦ Other means of communications
<p>Winter Weather Definitions</p> <ul style="list-style-type: none"> • Winter Weather Advisory <ul style="list-style-type: none"> ◦ Issued for accumulations of snow, freezing rain, freezing drizzle, and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life-threatening situations. • Winter Storm Watch <ul style="list-style-type: none"> ◦ Alerts the public to the possibility of a blizzard, heavy snow, heavy freezing rain, or heavy sleet. Winter Storm Watches are usually issued 12 to 48 hours before the beginning of a Winter Storm. • Winter Storm Warning: <ul style="list-style-type: none"> ◦ Issued when hazardous winter weather in the form of heavy snow, heavy freezing rain, or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin. • Ice Storm Warning: <ul style="list-style-type: none"> ◦ Heavy ice accumulations are imminent and the criteria for amounts vary over different county/parish warning areas. Accumulations range from 1/4 to 1/2 inch or more of freezing rain. • Freezing Rain Advisory: <ul style="list-style-type: none"> ◦ A trace to 1/4 inch (1–6 mm) of expected freezing rain is needed in any county warning area to prompt a freezing rain advisory. • Freeze Warning: <ul style="list-style-type: none"> ◦ Widespread temperatures at or below 32 °F. • Hard Freeze Warning: <ul style="list-style-type: none"> ◦ Widespread temperatures at or below 28 °F.

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee; Continued
<p>Hazards:</p> <ul style="list-style-type: none"> • Frostbite causes loss of feeling and color around the face, fingers, and toes. • Hypothermia is an unusually low body temperature. A temperature of below 95° is an emergency. • Slick or unpassable roads • Becoming stranded • Poor visibility due to blowing snow • Falling trees or limbs due to ice or wind • Carbon monoxide poisoning
<p>Preparedness:</p> <ul style="list-style-type: none"> • Where personnel or contractors are expected to be stationed during severe winter weather, consider availability of: <ul style="list-style-type: none"> ◦ Food - canned goods (with can opener) and perishable goods ◦ Water ◦ Warm, dry clothing/blankets ◦ Cots/bedding/sleeping bags • Ensure that all Winterization PMs have been conducted on all vehicles and equipment for the site: <ul style="list-style-type: none"> ◦ Verify coolant, antifreeze, and oil levels in fixed equipment: <ul style="list-style-type: none"> ■ Air/gas compressors ■ Lube Oil Cooling Water (LOCW) System ■ Compressor Station piping ■ Verify coolants levels in mobile equipment, such as skid steer, tractor, etc. (50/50 Anti-freeze mixture is -34° F.) ■ Confirm operability of heating equipment (heat trace, building heaters, etc.). ■ Drain water from all valves that would be affected by freezing weather. ■ Wrap all valves and water piping that would be affected by freezing weather. ■ Drain pump and pull plug at oil and water separator. ■ All equipment found to be or brought up to satisfactory protective temperatures. ■ Verify compressor unit coolant levels and coolant/oil standby (day) tank levels. <p>NOTE: If the site has a leased compressor unit, verify the lease company completes these functions ahead of impending weather.</p> <ul style="list-style-type: none"> • Make sure supplies are staged for working in freezing conditions and addressing frozen equipment. Consider: <ul style="list-style-type: none"> ◦ Plows on vehicles ◦ Salt ◦ Heating equipment - fire resistant or canvas tarps, heaters, hoses ◦ Temporary heat trace ◦ Diesel fuel

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee:, Continued
<p>Responsibilities—Manager, Operations:</p> <ul style="list-style-type: none"> • Review forecasted load expectations to determine if winter weather is expected to create high demand across the system or regionally. • Evaluate weather warnings. • At least 5 days before extreme weather is forecasted: <ul style="list-style-type: none"> ◦ begin discussing with VP/Director, Operations to confirm areas are making necessary preparations at facilities expected to be impacted. • At least 3 days before extreme weather is forecasted: <ul style="list-style-type: none"> ◦ make a final decision with Supervisor, Operations and appropriate support services on which facilities will be required to be staffed based on anticipated system conditions. ◦ hold a meeting with local team to cover preparedness actions and response expectations, as applicable: <ul style="list-style-type: none"> ■ Staffing, office closures, and adjusted hours. ■ If required, adjust the work schedules to provide adequate personnel and coverage for each shift. <ul style="list-style-type: none"> ■ Communication method and frequency. ■ Inspections/tasks to complete to prepare for the storm. ■ Inspections/tasks to complete during the storm. ■ Instruct employees to delay travel or leave early as needed. <p>NOTES:</p> <ul style="list-style-type: none"> ■ Response will vary depending on location and expected weather impacts. ■ Decision to staff a station will be based on numerous factors, but should be considered especially when dramatic temperature drop, heavy snow fall, or ice precipitation is anticipated. ■ Consider implementing schedule prior to event to make sure teams are on correct schedule.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Vehicles <ul style="list-style-type: none"> ◦ Make sure vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ■ Top off fuel ■ Check battery ■ Check antifreeze in cooling system (50/50 Anti-freeze mixture in -34° F) ■ Check tire tread ■ Top off Windshield Washing Fluid ■ Jumper Cables ■ Tow straps/chains (if applicable) ■ First Aid Kit ■ Emergency flares/lights/strobes ■ Operable radio or cell phone, with extra batteries and/or charger ■ Emergency thermal blanket ◦ Limit driving to business-critical operations in serious winter weather conditions. If driving is required, employees should plan the safest routes using recently plowed roads. • FACILITY/BUILDINGS: <ul style="list-style-type: none"> ◦ Take preliminary action to secure the facility before the weather deteriorates. ◦ Place generators on standby or proactively operate in case of a power outage. ◦ Drip water in all sinks to keep pipes from freezing. ◦ Close all valves on product and additive storage tanks, if applicable. ◦ Top-off all portable fuel cans.

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee; Continued
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Limit time outside, wear layers of warm clothing. • Watch for signs of frostbite and hypothermia <ul style="list-style-type: none"> ◦ Frostbite: <ul style="list-style-type: none"> ■ Signs: Numbness, white or grayish-yellow skin, and firm or waxyskin. ■ Actions: Go to a warm room. Soak in warm water. Use body heat to warm. Do not massage or use a heating pad. ◦ Hypothermia: <ul style="list-style-type: none"> ■ Signs: Shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech, and drowsiness. ■ Actions: Go to a warm room. Warm the center of the body first - chest, neck, head and groin. Keep dry and wrapped up in warm blankets, including the head and neck. • Avoid carbon monoxide poisoning. <ul style="list-style-type: none"> ◦ If stranded while traveling, make sure that the exhaust pipe is clear of snow/debris. Regularly crack the windows for short periods. ◦ Only use generators and grills outdoors and away from windows. ◦ Never heat your work area with a gas stovetop or oven.
<p>Winter Weather Ice and Blizzard Conditions</p> <p>Control room operators will continuously monitor the situation on the emergency radio, NOAA weather radio and/or television whenever winter storms are predicted to cause ice or blizzard conditions. If conditions warrant https://www.weather.gov/bgm/</p> <ul style="list-style-type: none"> • If road conditions are not conducive to safe travel, notify supervisor for guidance. • Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762 • Take preliminary action to secure the facility before the weather deteriorates. • Distribute emergency food and water to areas where personnel will be stationed. • Consider whether to have generators on standby. • Shut down high-voltage power and block in natural gas, if appropriate. • Close all valves on product and additive storage tanks, if appropriate. • Initiate Emergency Response Plan if the ice/blizzard causes spills, fires, or explosions. • If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Wildfires

WILDFIRES
<p>Wildfire</p> <p>Consult with local fire authorities on fire path of travel and safe evacuation routes.</p> <ol style="list-style-type: none"> 1. Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762 2. ESD and blow down equipment when requested by local authorities. 3. DO NOT attempt to fight a fire beyond the incipient stage.
<p>Wildfires are unplanned fires that burn in natural areas like forests, grasslands or prairies. These dangerous fires spread quickly and can devastate not only wildlife and natural areas, but also communities.</p>
Employee:
<p>Monitoring:</p> <ul style="list-style-type: none"> • Use the Fire and Smoke Map - AirNow Fire and Smoke Map <ul style="list-style-type: none"> ◦ This map shows known fires and air quality (airborne particulates and smoke plumes) throughout the U.S. Provides by AirNow and the Interagency Wildland Fire Air Quality Response Program. • The National Weather Service - Fire Weather forecasts and warnings.
<p>Wildfire/Smoke Definitions:</p> <ul style="list-style-type: none"> • Red Flag Warning: <ul style="list-style-type: none"> ◦ Take Action. Be extremely careful with open flames. NWS issues a Red Flag Warning, in conjunction with land management agencies, to alert land managers to an ongoing or imminent critical fire weather pattern. NWS issues a Red Flag Warning when fire conditions are ongoing or expected to occur shortly. • Fire Weather Watch: <ul style="list-style-type: none"> ◦ Be Prepared. A Watch alerts land managers and the public that upcoming weather conditions could result in extensive wildland fire occurrence or extreme fire behaviors. A watch means critical fire weather conditions are possible but not imminent or occurring. • Extreme Fire Behavior: <ul style="list-style-type: none"> ◦ This alert implies a wildfire likely to rage out of control. It is often hard to predict these fires because they behave erratically, sometimes dangerously. One or more of the following criteria must be met: <ul style="list-style-type: none"> ■ Moving fast ■ High rate of spread ■ Prolific crowning and/or spotting ■ Presence of fire whirls ■ Strong convection column • Air Quality (Smoke): <ul style="list-style-type: none"> ◦ Refer to 02.05.00.08 – Wildfire Safety for Monitoring Air Quality and Employee Safety and Health Protection. Defines Air Quality Index (AQI) to determine the needs for respiratory protection requirements. • PM_{2.5}: <ul style="list-style-type: none"> ◦ Fine particle particulate matter with diameters less than 2.5 microns, commonly found in smoke and haze. PM_{2.5} particles pose a health risk due to their ability to enter the lungs and bloodstream, affecting both the lungs and heart.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee; Continued
<p>Wildfire Hazards:</p> <ul style="list-style-type: none"> • Fire: <ul style="list-style-type: none"> ◦ During large fires, the air is superheated. This can lead to difficulty breathing or even scarring of the lungs. ◦ Superheating dries out the air, increasing the combustibility of other items throughout the area, increasing the likelihood and speed of the fire spreading. • Smoke / Inhalation of smoke: <ul style="list-style-type: none"> ◦ Fine particles can be inhaled deeply into the lungs; exposure to the smallest particles (PM2.5) can affect the lungs and heart. ◦ Fine particles are respiratory irritants, and exposure to high concentrations can cause persistent cough, phlegm, wheezing, and difficulty breathing. ◦ Exposure to fine particles can affect healthy people, causing respiratory symptoms and reductions in lung function. ◦ Particle pollution may also affect the body's ability to remove foreign materials from the lungs, such as pollen and bacteria. • Ash: <ul style="list-style-type: none"> ◦ Ash may be irritating to the skin, nose, and throat, and may cause coughing. ◦ Fine particles can be inhaled deeply into lungs and may aggravate asthma and make it difficult to breathe. ◦ AVOID direct contact with ash. If you get ash on your skin, in your eyes, or in your mouth, wash it off as soon as you can. ◦ Falling ash may also still be hot enough to cause other items (vegetation, roofs, debris, etc.) to actively catch on fire. • Burn Scars/Debris Flows: <ul style="list-style-type: none"> ◦ In areas where wildfires have occurred, vegetation may have burned away and soil properties altered, leaving behind bare ground that tends to repel water. This is called a burn scar, and as rain falls over it, the ground is unable to absorb the water. It either collects or runs off to the lowest point. ◦ Without vegetation to hold the soil in place, flooding can produce mud and debris flows. ◦ When normally dry soil becomes overly saturated, it can even reach the point where it turns to a liquid state and flows downhill, essentially becoming a river of mud, which can destroy buildings, wash out bridges and roadways and knock down trees.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee:, Continued
<p>Preparedness:</p> <ul style="list-style-type: none"> • Create a fire-resistant zone that is free of leaves, debris or flammable materials for at least 30 feet from all structures or outer fencing. • Distribute emergency food and water to areas where personnel will be stationed at critical facilities. Ensure availability of: <ul style="list-style-type: none"> ◦ Food – canned goods (with can opener) and perishable goods. ◦ Water ◦ Extra clothing/blankets. ◦ Cots/bedding/sleeping bags. • Plan an evacuation route away from the site and other alternate routes in case the first route is closed or threatened by wildfire. • Designate a room that can be closed off from outside air. <ul style="list-style-type: none"> ◦ Set up a portable air cleaner to keep indoor pollution levels low when smoky conditions exist. • Use high efficiency filters in your central air conditioning system to capture fine particles from smoke.
<p>Manager Actions:</p> <ul style="list-style-type: none"> • Review forecasted load expectations to determine if weather is expected to create high demand across the system or regionally. • Evaluate wildfire alerts and warnings. and will instruct Employees to delay travel or leave early as needed. • Communicate local area evacuation routes.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Take preliminary action to secure the facility before fires are within one mile of the facility. • Call for outside emergency services if not already on scene, if needed. • Cover vents. • Move flammable inventory inside. • Close all doors and windows. • Qualified Personnel will shut down high-voltage power if determined necessary. • Place generators and any other portable equipment on standby or proactively operate in case of a power outage, or any other use as needed. • Close all valves on product and additive storage tanks, if appropriate. • Secure or remove assets such as files, computers, and spare parts, if safe to do so. <ul style="list-style-type: none"> ◦ Place personal safety above asset retrieval. • Make sure company vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ◦ Top off fuel - closely monitor fuel levels and use. ◦ Check battery ◦ Top off Windshield Washing Fluid ◦ Jumper Cables ◦ Road Map ◦ First Aid Kit ◦ Fire resistant clothes/blanket ◦ Emergency food and water ◦ Sunglasses ◦ Emergency lights/strobes ◦ Operable radio or cell phone, with extra batteries/charger ◦ Fire extinguisher • Back vehicles into parking spaces or park them in an open space facing the direction of escape. • Consider the need for dedicating a road as "ingress" only with a second road as "egress" only. • Limit driving to critical operations in serious wildfire conditions. • Begin last-minute preparations. Note that employees may need time to prep their homes as well. • Shut off gas supply to commercial property. <ul style="list-style-type: none"> ◦ It's standard practice by emergency response to shut off the gas supply to prevent feeding a fire. Doing so yourself reduces risks to your structure. • If vents are easily accessible and you do not have metal mesh covers, a lightweight noncombustible material (such as sheet metal) can be installed. These covers should be removed once the fire and ember threat passes. • Close doors and windows <ul style="list-style-type: none"> ◦ Shut all interior and exterior doors and windows and leave them unlocked. ◦ Close commercial garage doors all the way. • Shut off HVAC <ul style="list-style-type: none"> ◦ This will help prevent outside smoke from entering the building and causing preventable damage. • Leave property easily seen and accessible for firefighters. <ul style="list-style-type: none"> ◦ Leave lights on so firefighters can see the building under smoky conditions. ◦ Consider the need to open gates to allow immediate access to emergency vehicles. • Do not leave landscape sprinklers on. It can negatively affect water pressure.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee; Continued
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Evacuate immediately if authorities tell you to do so. • Always evacuate if you feel it is unsafe to stay. <ul style="list-style-type: none"> ◦ DO NOT wait to receive an emergency notification if you feel threatened by a fire. • Make sure your designated contact knows your plan and how to communicate with you to know you are safe. • Know your site and local area's evacuation routes. <ul style="list-style-type: none"> ◦ You may have to evacuate quickly. ◦ Know your community's emergency response plan and have a plan for where to go. ◦ Follow instructions from local authorities. They will provide the latest recommended routes for leaving your location. • If driving is required, plan the safest route moving away from the fire. <ul style="list-style-type: none"> ◦ Consider the possibility of limited visibility due to heavy smoke. ◦ Consider the condition of roads for use by site personnel as well as emergency vehicles. • Keep your car windows up and the air conditioning on to prevent embers and smoke from entering the vehicle. • If you are not ordered to evacuate but smoky conditions exist: <ul style="list-style-type: none"> ◦ Stay inside in a safe location or go to a community building where smoke levels are lower. ◦ If your system has fresh air intake, set the system to "recirculate" mode and close the outdoor intake damper. ◦ Move to a designated room that can be closed off from outside air. Close all doors and windows. Set up a portable air cleaner to keep indoor pollution levels low when smoky conditions exist.

3.10 SECURITY RESPONSE MEASURES

3.10 Security Response Measures
Employee:
3.10.1 Refer to facility site-specific security plan or 07.50.00.01 – Physical Security.

3.11 SITE SPECIFIC EMERGENCY RESPONSE PROCEDURES

4.0 POST EMERGENCY ACTIVITIES

4.1 RESTORATION OF SERVICE

4.1 Restoration of Service
Employee:
4.1.1 Follow the appropriate SSOP, SSMP, and Pipeline Control Procedures when restoring service and returning to normal operations.

4.2 DOCUMENTATION

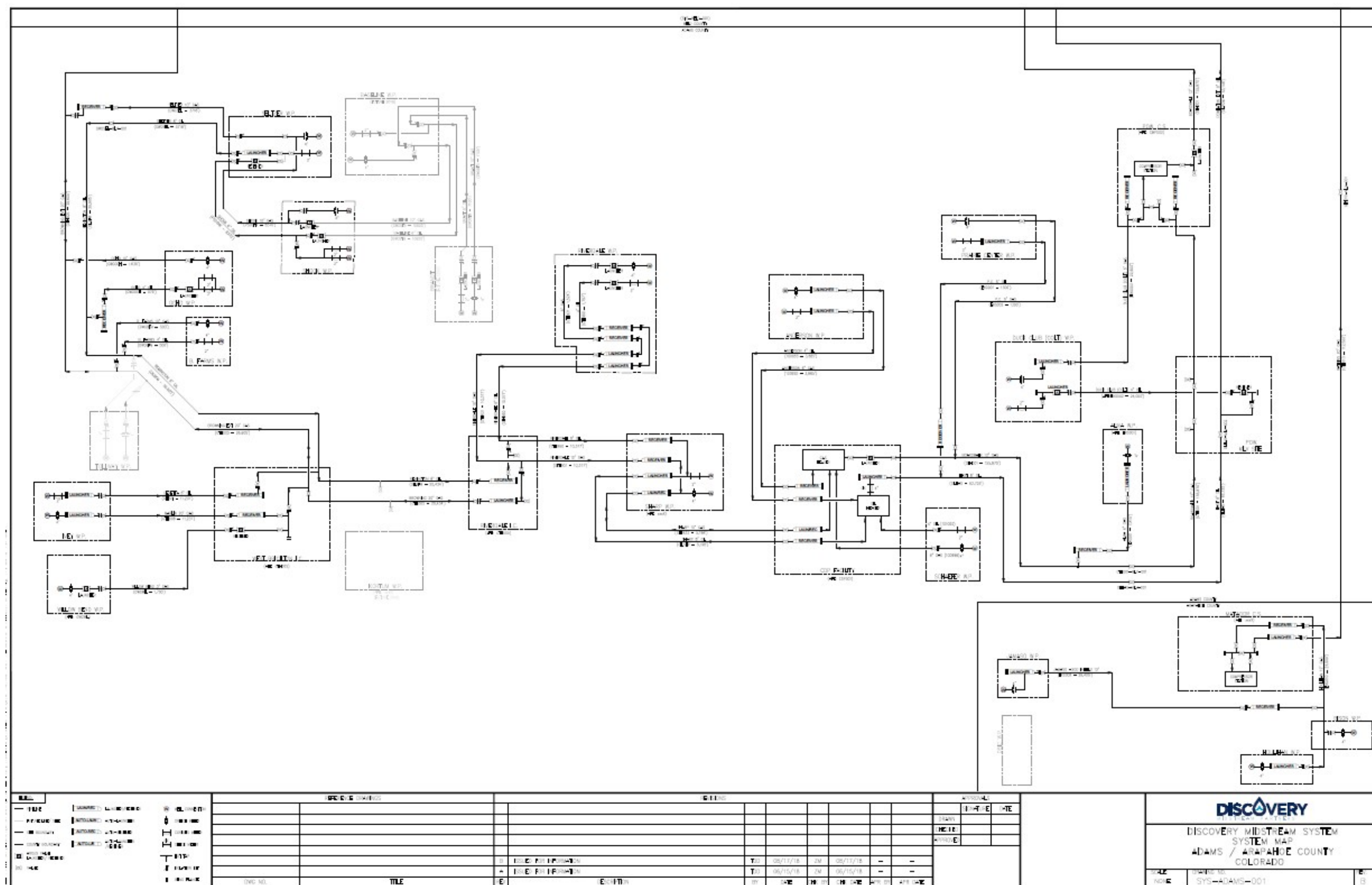
4.2 Documentation
Incident Commander:
4.2.1 Gather all necessary documentation and submit to the Safety Representative.

4.3 AFTER ACTION REVIEW (AAR)

4.3 After Action Review (AAR)
Incident Commander; Safety Representative:
4.3.1 Schedule a critique of the Emergency Response and inform affected personnel. Document the critique on <u>F10-103 - Emergency Response or Drill Documentation</u> .

ATTACHMENT A - MAPS AND DRAWINGS

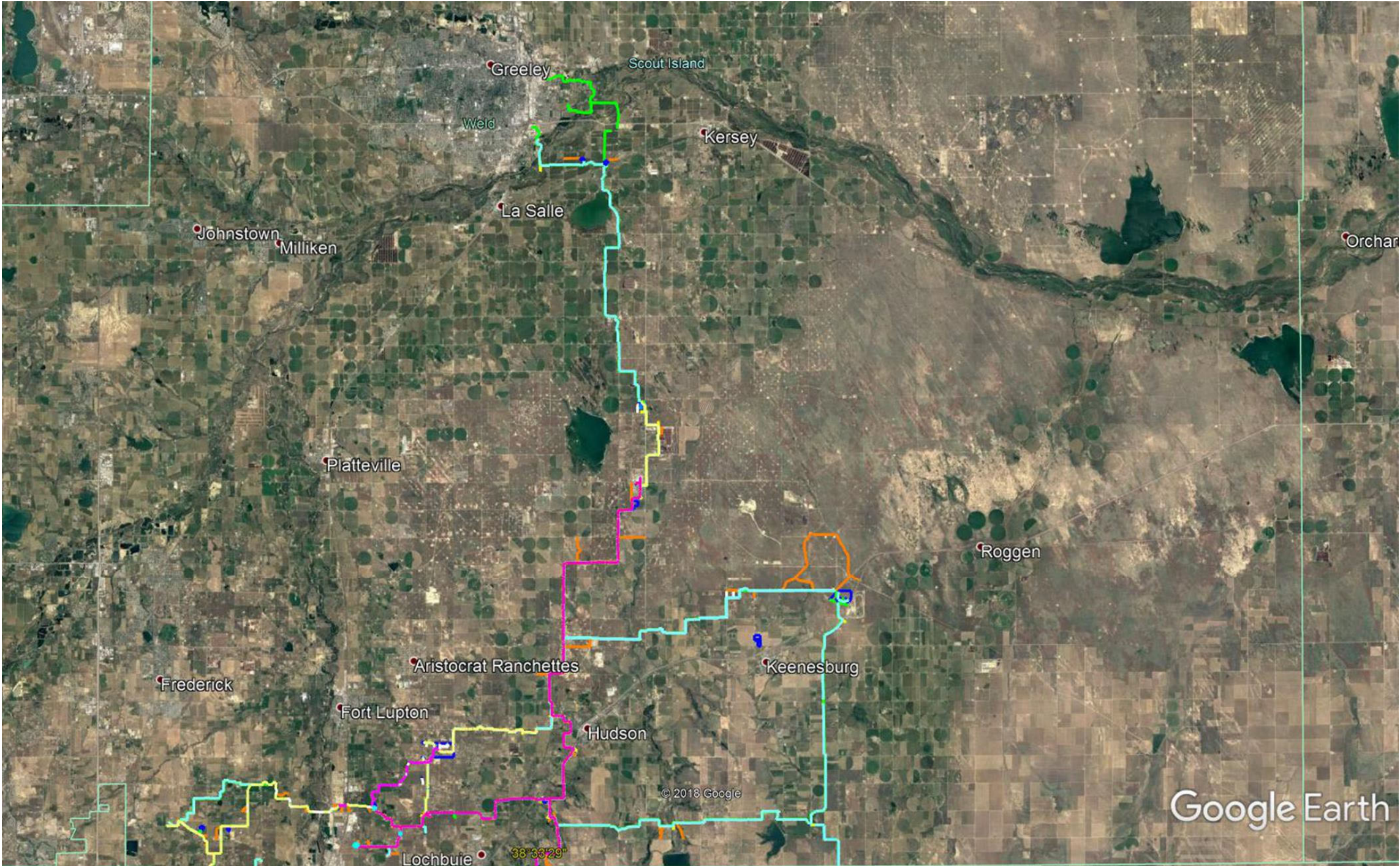
[Click to view/print Discovery Midstream System - System Maps](#)



ATTACHMENT A - MAPS AND DRAWINGS, CONTINUED

[Click to view/print Weld County Overview Map](#)

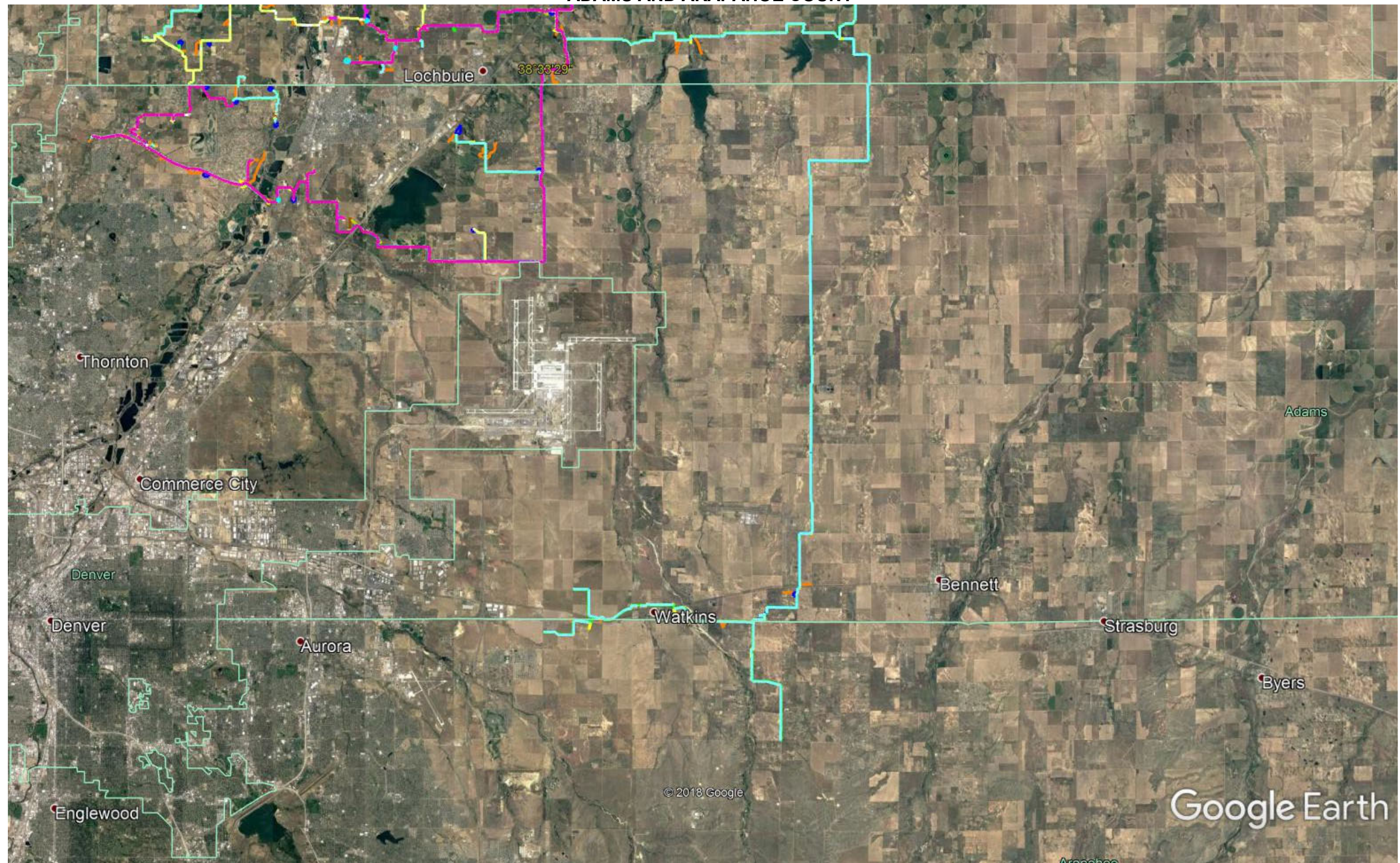
WELD COUNTY



ATTACHMENT A - MAPS AND DRAWINGS, CONTINUED

[Click to view/print Adams and Arapahoe County Overview Map](#)

ADAMS AND ARAPAHOE COUNTY



ATTACHMENT B - ADDITIONAL INFORMATION

No Files Uploaded

REVISION HISTORY

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
11/18/2021	ERP Scope and Description Scope and Description	
11/18/2021	ERP 1.0 Reporting and Notification 1.0 Reporting and Notification	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Fire Department	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Emergency Management	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Sheriff/Police Dept	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Ambulance/EMT	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal)	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Pipeline Safety Hotline	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Matt Norton, Mgr Operations, Williams/Rocky Mountain Midstream	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Craig Strother, Supv Operations	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Josh Bruce, Supv Operations	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Erin Schlunegger, Safety & Health Specialist IV	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.4 - Additional Contacts (External)	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.4 - Additional Contacts (External) Insert O'Brien's Oil Pollution Services (OOPS)	
11/18/2021	ERP 2.0 Available Resources 2.0 Available Resources	
11/18/2021	ERP Attachment A- Maps and Drawings Attachment A- Maps and Drawings	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.3 - Oil Spill Removal Organizations (OSROs) Insert Forefront Emergency Management, LP	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Craig Strother	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Josh Bruce	
5/23/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
6/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Erin Schlunegger, Process Safety Management Coordinator Sr	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kody Denny, Operations Technician Lead	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kenneth Meritt, Safety Specialist IV, Williams	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Jonathan Torizzo, Environmental Specialist IV	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Christopher Darling, Coordinator Maintenance	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Weston Sellers, Engineer Sr	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Devin Tibljas, Mgr Operations	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Greg Anoaia, SupvEH&S	
11/9/2022	ERP 3.0 Response Actions 3.9 Natural Disasters	
12/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Sydney Rippey, Williams	
12/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sydney Rippey, Williams	
12/5/2022	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies	
12/5/2022	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Weld County Communications Center	
6/1/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Josh Bruce	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Josh Bruce, Supv Operations	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Mick Blackwell, Operations Technician Sr	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Josh Bruce, Supv Operations	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Scott Alexander, Operations Technician Sr	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Scott Alexander	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Scott Alexander, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Scott Alexander, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Christopher Darling, Operations Technician Sr	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Thomas Vanbibber, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Thomas Vanbibber, Williams	
2/21/2024	ERP 2.0 Available Resources 2.0 Available Resources	
3/14/2024	ERP 3.0 Response Actions 3.4 Responding to an Incident at a Remote Site	
3/14/2024	ERP 3.0 Response Actions 3.2 Establish Incident Command (ICS)	
3/14/2024	ERP 3.0 Response Actions 3.1 Evacuation	
3/18/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Sam Tippey, Supv Operations	
4/30/2024	ERP 3.0 Response Actions 3.1 Evacuation	
5/21/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sam Tippey	
5/28/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sam Tippey	
5/28/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Matt Norton, Mgr Operations, Williams/Rocky Mountain Midstream	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Weston Sellers, E&C Project Manager Sr	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Cailin Harrington, Engineer II	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kevin Crawford, Operations Technician Sr	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Alexander Ban, Operations Technician Sr	
11/7/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Devin Tibljas	

Exhibit K
Bennett-Watkins Fire District Review Application



Bennett-Watkins Fire Rescue

District Office: 303-644-3572 Fax: 303-644-3401
355 4th Street, Bennett, CO 80102

"Striving to Preserve Life and Property"



Fire Service Development Application

Applicant Information		
Primary Contact: Janice Kinnin on behalf of Rocky Mountain Midstream, LLC		Application Date: 11/10/25
Current Address: 13781 Pacific Circle		
City: Mead,	Zip: 80542	County: Weld
Phone: 303-260-8846	Fax:	Email: janicekinnin@outlook.com

Project Information		
<input type="checkbox"/> Single Family <input type="checkbox"/> Multi-Family → # of Units _____ <input type="checkbox"/> Pole Barn / Accessory Structure <input type="checkbox"/> Temporary Structure (Tent) <input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> Oil & Gas / Solar <input type="checkbox"/> Site Development <input type="checkbox"/> Commercial/Retail <input type="checkbox"/> Industrial/Warehouse <input type="checkbox"/> Tenant Finish <input type="checkbox"/> Fire Alarm System	Natural gas gathering pipeline
Project Address: Multiple		
City:	Zip:	County: Arapahoe & Adams Counties
Description of Project:	Construction of up to 10" natural gas gathering pipeline in conjunction with DJ South Gathering's up to 8" crude oil pipeline. The pipeline will originate at Occidental Petroleum Corp's Parcel 1981-00-0-00-244, Remora pad site located on S6, T4S, R63W Arapahoe County and end at Rocky Mountain Midstream's parcel 0181735200001, 2150 Manilla Rd., Adams County.	
Occupancy Class:	Construction Type:	Total Square Footage:
Project Start Date: 06/26	Project End Date: 12/26	Building Permit #:
Estimated Total Cost of Project / Project Valuation: \$ 2.0M		

Contractor/Builder Information (if applicable)		
Contact Person: TBD	Company Name:	
Company Address:		
Phone:	Fax:	Email:

Are there any subcontractors and/or other outside companies or individuals being utilized for this project? If YES, please include a list of all business/individual names and contact information including, phone, fax, and email, as well as a description of each company/person's scope of services and responsibilities relating to the above project (i.e. Sprinkler Installer, Fire Protection Engineer, etc).

Submittals

Submittals shall include a completed Fire Service Development Application, applicable plan review, development, and/or permitting fees, and all applicable documents, including but not limited to; engineered drawings, plat plans, site plans, technical data, etc. Submittals shall be included as part of this application.

All submittals should be sent in an electronic/computer-based PDF format to:
Submittals@BennettFireRescue.org

Fees and Codes

In accordance with Resolution No. 2016-5 the District has adopted and shall enforce where applicable the 2012 International Fire Code and other related Codes and Standards contained therein (i.e. National Fire Protection Association (NFPA), Underwriters Laboratories (UL), Etc.). The District also has the authority to enforce other such Codes and Standards as may be adopted or recognized by other Authorities Having Jurisdiction (AHJ) including local, state, national and governmental agencies. This may include, but shall not be limited to, Building Code, Mechanical Code, and Electrical Code.

Fees	
Plan Review / Inspection Fee	\$
Permit Fee	\$
Re-Inspection Fee	\$
Impact/Development Fee	\$
Total	\$

Fees may be submitted as cash or check payable to:
Bennett Fire Protection District

All fees are due at the time of application submission, with the exception of Impact/Development fees for projects within the Town of Bennett municipal limits. Permits will not be issued and plan reviews will not be completed until a full submission, including the appropriate fee payment, is received for processing. Failure to correctly pay for the required fees will result in rejection of the application. Fee Schedules are available for review at the District Office or on our website at www.bennettfirerescue.org.



I hereby state that the above information is correct. I recognize that the approval of plans and specifications does not permit the violation of the building codes, fire codes, town/county ordinances, or state law. I consent to provide entry to inspectors during reasonable hours and to request inspections as needed. I consent to pay the Fire District plan review fees and permit fees pursuant to Section 32-1-1001(1)(j), C.R.S., and any reinspection fees that may be required.

Signature:

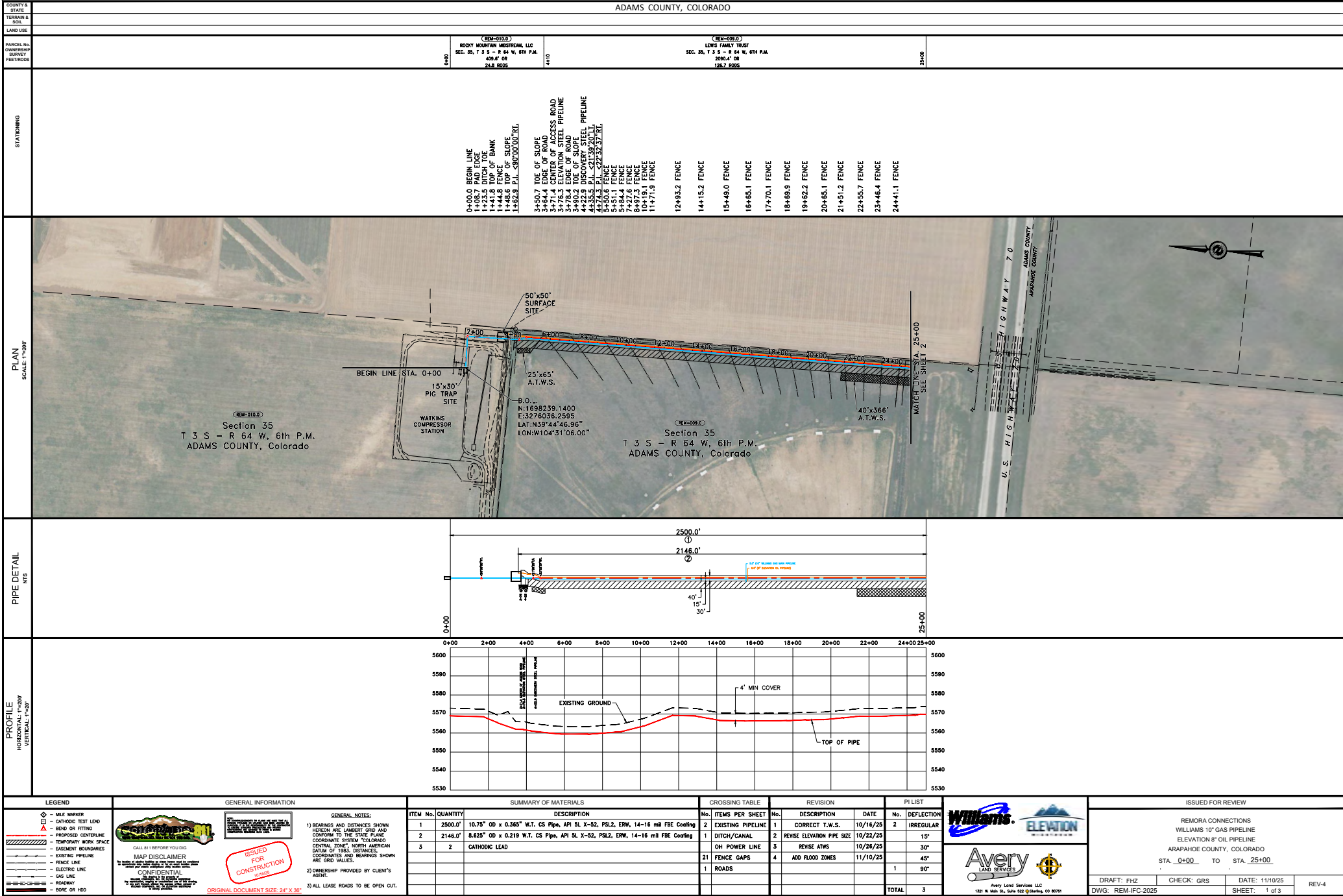
Janice Kinnin

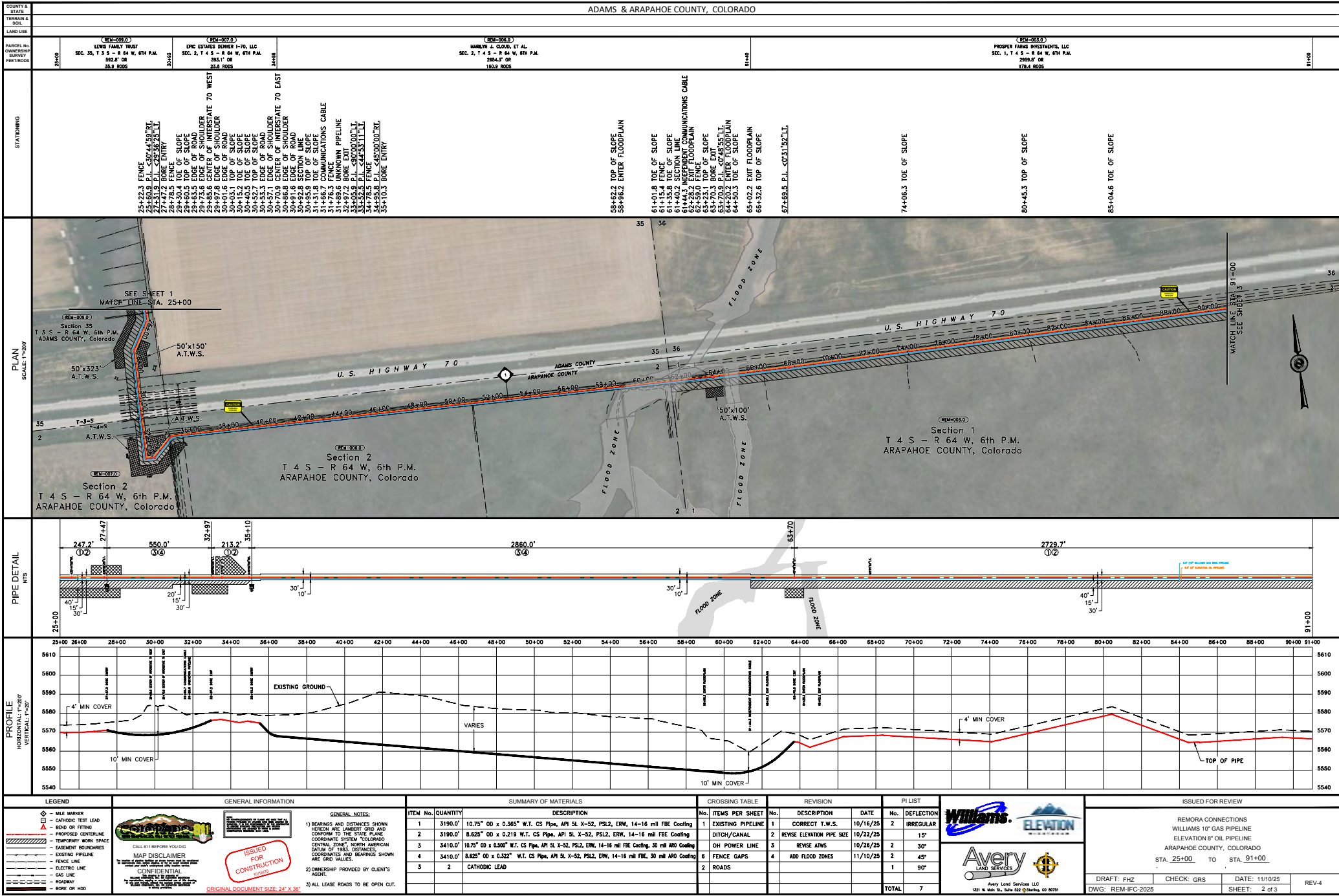
Printed Name: Janice Kinnin, on behalf of Rocky Mountain Midstream, LLC

Date: **11/10/25**

 Fire District Use Only: 	
Project Name:	
Date Received:	Received by:
Reviewed / Date:	
<input type="checkbox"/> Approved Without Conditions <input type="checkbox"/> Approved With Conditions as Noted <input type="checkbox"/> Rejected / Denied (Re-submittal Required)	Fees Required: \$
	Fees Received: \$
	Date Received:
	Form of Payment: <input type="checkbox"/> Cash / Check # _____ <input type="checkbox"/> Online Pay Portal
<input type="checkbox"/> Delivered to office in person <input type="checkbox"/> Delivered by mail	<input type="checkbox"/> Submitted online through email







COUNTY & STATE
TERRAIN & ELEVATION
LAND USE

PARCEL No.
OWNERSHIP
SURVEY
FEETINGS

STATENING

PLAN
SCALE: 1"=200'

PIPE DETAIL
NTS

PROFILE
HORIZONTAL SCALE: 1"=200'
VERTICAL SCALE: 1"=20'

ARAPAHOE COUNTY, COLORADO

SECTION	OWNER	SECTION 1	SECTION 2	SECTION 3	SECTION 4
91+00	PROSPER FARMS INVESTMENTS, LLC SEC. 1, T 4 S - R 64 W, 6TH P.M. 2333.7' OR 141.4' 2000'	114+24	JOHN DANIEL THOMPSON, ET AL. SEC. 6, T 4 S - R 63 W, 6TH P.M. 1283.4' OR 77.8' 2000'	137+17	AJS MANAGEMENT CO., LLC SEC. 6, T 4 S - R 63 W, 6TH P.M. 1027.4' OR 63.3' 2000'

Section 1
T 4 S - R 64 W, 6th P.M.
ARAPAHOE COUNTY, Colorado

Section 6
T 4 S - R 63 W, 6th P.M.
ARAPAHOE COUNTY, Colorado

GENERAL INFORMATION		SUMMARY OF MATERIALS		CROSSING TABLE		REVISION		PI LIST	
1	4644.5'	10.75" OD x 0.365" W.T. CS Pipe, API 5L X-52, PSL2, ERW, 14-16 mil FBE Coating	1	EXISTING PIPELINE	1	CORRECT T.W.S.	10/16/25	1	IRREGULAR
2	4644.5'	8.625" OD x 0.219 W.T. CS Pipe, API 5L X-52, PSL2, ERW, 14-16 mil FBE Coating	2	DITCH/CANAL	2	REVISE ELEVATION PIPE SIZE	10/22/25	15'	
			1	OH POWER LINE	3	REVISE ATWS	10/26/25	30'	
			1	FENCE GAPS	4	ADD FLOOD ZONES	11/10/25	45'	
				ROADS				90'	
								TOTAL 4	

LEGEND

- MILE MARKER
- △ CATHODIC TEST LEAD
- BEND OR FITTING
- PROPOSED CENTERLINE
- TEMPORARY WORK SPACE
- EASEMENT BOUNDARIES
- EXISTING PIPELINE
- FENCE LINE
- ELECTRIC LINE
- GAS LINE
- ROADWAY
- BORE OR HED

GENERAL NOTES:

- BEARINGS AND DISTANCES SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, COLORADO CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983. DISTANCES ARE GRID VALUES.
- OWNERSHIP PROVIDED BY CLIENT'S AGENT.
- ALL LEASE ROADS TO BE OPEN OUT.

MAP DISCLAIMER:
CALL 811 BEFORE YOU DIG

ISSUED FOR CONSTRUCTION

ORIGINAL DOCUMENT SIZE: 24" X 36"

Williams

ELEVATION

Avery

Avery Land Services LLC
1321 W. Main St., Suite 202, Greeley, CO 80639

ISSUED FOR REVIEW

REMORA CONNECTIONS
WILLIAMS 10" GAS PIPELINE
ELEVATION 8" OIL PIPELINE
ARAPAHOE COUNTY, COLORADO
STA. 91+00 TO STA. 137+44

DRAFT: FHZ	CHECK: GRS	DATE: 11/10/25	REV: 4
DWG: REM-IFC-2025		SHEET: 3 of 3	



Rocky Mountain Midstream - Pipelines & Gathering Systems

ERP

Plan Last Revised: 11/07/2024

Developed by:



JENSEN HUGHES

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Emergency Response Plan

Company employees are not trained first responders and are only trained to recognize an emergency event, initiate emergency shutdown (if necessary), evacuate to a safe location and notify local 911. All Company employees complete annual emergency response training and have a basic Incident Command System (ICS) understanding. Company employees will be considered Subject Matter Experts (SMEs) on Company assets and facilities when working in Unified Command with external response agencies.

Rocky Mountain Midstream - Pipelines & Gathering Systems

Geographic Location	
Physical Address:	
City, State, Zip:	,
County/Parish:	
Latitude/Longitude:	/

Scope		
Asset Name	Location	Description

Description
While responding to an Emergency Event at a Rocky Mountain Midstream Asset you may encounter: Natural Gas, Natural Gas Liquids, Ethane, Methanol, Glycol, Engine Oil, Aerosols, Nitrogen, Crude Oil, etc. This list is not all inclusive. <u>Please ensure you contact a Williams Representative before entering the site.</u>

Area Office Information	
Phone Number:	
Office Address:	13781 Pacific Circle Mead, CO 80504

1.0 REPORTING AND NOTIFICATION

Upon recognition of an Emergency Event:

1.0 Reporting and Notification
Employee:
1.1 Activate local alarm system if not already activated.
1.2 Summon Emergency Response Agencies (ERAs) listed in the table below. Immediately contact: <ul style="list-style-type: none">• 911• Security Operations Center• Pipeline Control Make additional notifications in the order most appropriate for the emergency event.
1.3 Notify the Required Contacts (Area Manager, Supervisor, etc.) listed in the table below.
1.4 Notify Additional Contacts as needed.
NOTE: Due to the vast locations of the pipeline systems across three counties the best number to call is 911 in the event of an emergency.

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES

* 24-hour number

IMMEDIATE NOTIFICATIONS		CALLED
Immediate Notifications		
Williams SOC (Onshore Spill Reporting or Bomb Threat)	855-945-5762* (Emergency)	<input type="checkbox"/>
Williams Media Hotline	800-945-8723* (Emergency) Media@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES, CONTINUED

* 24-hour number

911 OR WELD COUNTY REGIONAL COMMUNICATIONS 1-970-350-9600		CALLED
Agency or Individual		
Emergency Management	911* (Emergency)	<input type="checkbox"/>
Sheriff/Police Dept.	911* (Emergency)	<input type="checkbox"/>
Fire Department	911* (Emergency)	<input type="checkbox"/>
Ambulance/EMT	911* (Emergency)	<input type="checkbox"/>

TABLE 1.1 - EMERGENCY RESPONSE AGENCIES, CONTINUED

* 24-hour number

COUNTY/PARISH NAME PSAP/ECC – 911 (10-DIGIT ALTERNATE PHONE#)		CALLED
COUNTY/PARISH NAME PSAP/ECC - 911 (10-digit alternate phone#)		
Weld County Communications Center	970-350-9600 (Office)	<input type="checkbox"/>

TABLE 1.2 - REQUIRED CONTACTS (INTERNAL)

* 24-hour number

REQUIRED CONTACTS (INTERNAL)		CALLED
Company Personnel		
Pipeline Safety Hotline	877-614-7183 (Office)	<input type="checkbox"/>
Kody Denny Supv Operations	970-230-2658 (Office) 970-230-2658 (Mobile) KodyDenny@williams.com (Email)	<input type="checkbox"/>
Sam Tippey Supv Operations	970-502-4255* Sam.Tippey@Williams.com (Email)	<input type="checkbox"/>
29 CFR 1910.120 HAZWOPER Q/IC Training		
Devin Tibljas Mgr Operations Sr	918-284-1208 (Office) 918-284-1208 (Mobile) Devin.Tibljas@williams.com (Email)	<input type="checkbox"/>
Kenneth Meritt Safety Specialist IV, Williams	303-548-6739* (Mobile) 970-381-7705* (Home) kenneth.meritt@williams.com (Email)	<input type="checkbox"/>
Scott Alexander Supv Operations	720-202-8659 (Office) 720-202-8659 (Mobile) Scott.Alexander@Williams.com (Email)	<input type="checkbox"/>
Thomas Vanbibber Operations Tech Senior, Williams	417-827-4061* (Mobile)	<input type="checkbox"/>
Mick Blackwell Supv Operations	303-870-0909 (Office) 303-870-0909 (Mobile) Mick.Blackwell@williams.com (Email)	<input type="checkbox"/>
Jonathan Torizzo Environmental Specialist IV	303-775-5382 (Office) 303-775-5382 (Mobile) Jonathan.Torizzo@Williams.com (Email)	<input type="checkbox"/>
United States		
Cailin Harrington Engineer II	918-232-4240 918-232-4240 Cailin.Harrington@Williams.com (Email)	<input type="checkbox"/>
Kevin Crawford Operations Technician Lead	303-880-5281 (Office) 303-880-5281 (Mobile) Kevin.Crawford@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.2 - REQUIRED CONTACTS (INTERNAL), CONTINUED

* 24-hour number

REQUIRED CONTACTS (INTERNAL), CONTINUED		CALLED
Company Personnel, Continued		
Alexander Ban Operations Technician Sr	303-880-0636 (Office) 303-880-0636 (Mobile) AlexBan@Williams.com (Email)	<input type="checkbox"/>

TABLE 1.3 - OIL SPILL REMOVAL ORGANIZATIONS (OSROS)

* 24-hour number

OIL SPILL REMOVAL ORGANIZATIONS (OSROS)	
USCG CLASSIFIED OSRO	
Forefront Emergency Management, LP Lakeway, TX	844-427-7767 (Office)

TABLE 1.4 - ADDITIONAL CONTACTS (EXTERNAL)

* 24-hour number

ADDITIONAL CONTACTS (EXTERNAL)		CALLED
Offshore Releases and Spills		
O'Brien's Oil Pollution Services (OOPS)	985-781-0804	<input type="checkbox"/>

2.0 AVAILABLE RESOURCES

Resource	Location	Company Name & Phone Number (if 3rd Party Contractor)
Hazardous Gas Detectors	Compressor Stations and associated buildings	
First Aid Supplies	Compressor Stations & Company Vehicles	
Notification Lists	Plant Control Room & Company Vehicles	
Maps of the Area	Plant Control Room & Company Vehicles	
P&IDs of the facility/process	Paper copies and online system	
Cell Phones	Plant Control Room and select personnel	
Portable Fire Extinguishers	Company Vehicles & Various Locations	
Stoppole Equipment		Contractor: T.D. Williamson, 1-918-447-5000
Pick-up Trucks (4WD and 1-ton), Rubber Tire Backhoe, Track Hoe, Air and Gas Trash Pumps, Vacuum Units, Vacuum Trucks, Semi-Tractors, Low-boy Trailers, Gas Monitors, Welding Rigs, Boom Trucks, PPE, Pipe Repair Clamps and Sleeves		Contractor 1888 Energy Services Contact Rocky Allen (970)518-8133
OSRO - Spill/Emergency Management Team Services, PREP Compliance, extended OSRO network		Contractor (Retainer) Forefront Emergency Management, LP 2802 Flintlock Trace, Ste B104 Lakeway, TX 844-427-7767 78738

3.0 RESPONSE ACTIONS

3.1 EVACUATION

3.1 Evacuation
Some Employees may delay evacuation until critical functions have been performed (e.g., closing valves, etc.) as long as it does not jeopardize the Employee's safety.
If an Employee feels they are in danger, they should evacuate immediately.
Employee:
3.1.1 Do not start vehicles or other combustible engine powered equipment, as these can be an ignition source.
3.1.2 Shut down equipment only if it can be done from a safe distance and is safe to do so.
3.1.3 Observe wind direction, walk to the nearest exit, and proceed to the designated gathering point.
3.1.4 Take the following items if safe to do so: <ul style="list-style-type: none"> • 4-Gas Monitor • Handheld radios • Facility satellite phone (if applicable) • Company cell phones • Visitor Logbook or sign in app • Emergency Response Plan • Portable First Aid Kit/AED
3.1.5 When the evacuation is complete, account for all personnel before proceeding: <ul style="list-style-type: none"> • Determine if anyone is missing. <ul style="list-style-type: none"> • Attempt to contact the missing person. • Conduct a perimeter check, if necessary and it's safe to do so. • Determine if rescue is needed: <ul style="list-style-type: none"> • Contact Police/Fire/EMS/Sheriff as necessary.
In the case of failure of pipeline system transporting a highly volatile liquid, use of appropriate instruments (some listed in 3.1.4) to assess the extent and coverage of the vapor cloud and determine the hazardous areas. Keep personnel and the public out of areas determined to be hazardous and isolate and deny access or entry in accordance with section 3.5.

3.2 ESTABLISH INCIDENT COMMAND (ICS)

3.2 Establish Incident Command (ICS)	
<input type="checkbox"/>	Employee:
<input type="checkbox"/>	3.2.1 If first on site:
<input type="checkbox"/>	Establish the Incident Command System (ICS) and:
<input type="checkbox"/>	<ul style="list-style-type: none"> • Appoint a Safety Officer.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Determine the location of the Incident Command Post.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Once qualified responders arrive, transition Incident Command to the appropriate agency.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Integrate into the Unified Command.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Establish reliable communication methods between individuals who will play an active role in the response.

3.3 ESTABLISH UNIFIED COMMAND

3.3 Establish Unified Command	
<input type="checkbox"/>	Employee:
<input type="checkbox"/>	3.3.1
<input type="checkbox"/>	<ul style="list-style-type: none"> • Meet Responders at a safe location and brief on situation.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Form Unified Command with First Responders and discuss objectives: <ul style="list-style-type: none"> • Do not permit entry unless scene is stable and approved by Williams. • Plan for personnel safety, scene stabilization, public safety, and site control (consider law enforcement if needed). • Determine the most effective communication method that will be used between agencies. • Determine how accountability will be kept once permission to enter the facility or site has been granted by Williams Leadership.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Stage emergency equipment. Consider hazards, atmospheric conditions and locations where blowdowns may need to occur.
<input type="checkbox"/>	<ul style="list-style-type: none"> • Do not speak to the media, the Fire Chief and an appointed Williams Representative will fill the responsibility should it become necessary.

3.4 RESPONDING TO AN INCIDENT AT A REMOTE SITE

3.4 Responding to an Incident at a Remote Site	
Employee (First on Scene):	
3.4.1 Observe and evaluate the general conditions.	
3.4.2 Do not perform mitigation actions until qualified responding personnel arrive on scene.	
3.4.3 Establish Incident Command described in steps above.	

3.5 ISOLATE AND DENY ACCESS OR ENTRY

3.5 Isolate and Deny Access or Entry
Employee:
<p>3.5.1 Working with Emergency Response Agencies:</p> <ul style="list-style-type: none"> Isolate the scene of the emergency event. Establish perimeter controls to keep persons out of any potentially hazardous areas. <ul style="list-style-type: none"> For Onshore Assets <ul style="list-style-type: none"> Do not use Company vehicles to block public roadways. Work with law enforcement and first responders if roadways will need to be shut down. Assist in establishing Hot (Red), Warm (Yellow), and Cold (Green) zones. Take actions to protect personnel and the affected public.
3.5.2 Identify and remove ignition sources (e.g., pilot lights, engines, motors, etc.) only if it does not put individuals at risk.
3.5.3 Take actions, according to site-specific procedures, to confine and control the release. Do not take any action unless properly trained to perform the task and in a safe location.

3.6 MEDICAL/FIRST AID

3.6 Medical/First Aid
<input type="checkbox"/> Employee:
<input type="checkbox"/> 3.6.1 Provide First Aid and CPR, up to level of ability, training, and personal comfort. Any treatment beyond First Aid or CPR will be performed by trained professionals.
<input type="checkbox"/> 3.6.2
<input type="checkbox"/> <ul style="list-style-type: none"> If safe to do so, retrieve necessary equipment. <ul style="list-style-type: none"> AED's are in office locations. First aid and bloodborne pathogen kits are in the office areas, control rooms and trucks.
<input type="checkbox"/> <ul style="list-style-type: none"> <u>Check</u> the area for hazards before entering the scene. Do not place yourself in danger when trying to help someone. <ul style="list-style-type: none"> If the area is safe, check the victims.
<input type="checkbox"/> <ul style="list-style-type: none"> <u>Call</u> or have someone call 911 and make appropriate notifications. <ul style="list-style-type: none"> If possible, have someone meet the emergency responders at a main entrance, main road or helipad (Offshore) to escort them to the victim's location.
<input type="checkbox"/> <ul style="list-style-type: none"> <u>Care</u> for the victim. <ul style="list-style-type: none"> Only administer care up to the level of your training. If the victim is conscious, ask for consent. If the victim is unconscious or too ill to reply, consent is implied. Always wear required PPE for the task.
<input type="checkbox"/> Incident Commander:
<input type="checkbox"/> 3.6.3 Report all injuries and exposures.

3.7 SHUT-DOWNS OR PRESSURE REDUCTIONS

3.7 Shut-Downs or Pressure Reductions
Employee:
3.7.1 Perform emergency shutdown, pressure reduction, and venting of the affected asset to minimize hazards to life or property. Follow site-specific procedures.

3.8 IDENTIFY HAZARDOUS MATERIALS

3.8 Identify Hazardous Materials
Employee:
3.8.1 Identify any hazardous materials that have been spilled or released.
3.8.3 Use appropriate PPE for the situation.
3.8.2 Use Safety Data Sheets (SDS) or the NAERG to identify risks associated with spilled or released hazardous materials: <ul style="list-style-type: none">• Safety Data Sheets• MSDSonline/Velocity EHS (phone): 888-362-2007• Or, Local Chemical Management System

3.9 NATURAL DISASTERS

All Disasters

- If the event causes spills, fires, or explosion:
 - Initiate the Emergency Plan.

Preparedness Kit

- Develop a preparedness kit, as appropriate for local condition.
- Consider obtaining the following items to be stored in a pre-designated location, known to all personnel that are assigned to the site.
- The items should be stored in containers that are easily identifiable, portable, and stored in a cool, dry location:
 - First-aid kit
 - Paper and pencils
 - Non-sparking wrench or pliers
 - Flashlight
 - Cell phone, with charger
 - Hand-held 2-way radio
 - Extra batteries for each of the items listed above
 - Cleaning items (garbage bags, moist towelettes, soap (body and hand), cleaning solutions)
 - Plastic sheeting
 - Duct tape
 - Fire extinguisher
 - Construction tools (for post-incident use)
 - Leather gloves
 - Hard hats
 - Lumber for shoring
 - Saws - for clearing debris
 - Whistles/air horns

During/After the Event

- Notifications:
 - If applicable, report event to
 - Security Operations Center (SOC) - 855-945-5762
 - Pipeline Control - 918-573-7108
 - If the facility has any change to normal operations, the Area Operations Manager will notify:
 - Immediate chain of command
 - Area Operations Supervisor
 - Pipeline Operations Control
 - Notifications should also be made to Volume Control and appropriate support groups of the **facility's temporary operational status due to the weather conditions.**

Post Incident Actions

- Re-entry:
 - Re-entry into the area will be authorized only after approval by:
 - LEPC
 - Local authorities
 - Area Operations Supervisor
 - The all-clear will be required for all emergencies prior to re-entry and will be based on situations in the field.
- Recovery:
 - When restoring service and returning to normal operations:
 - Follow appropriate Site-Specific Operating Procedures and Pipeline Control Procedures
 - For repair and/or startup of physical assets, refer to 09.00.00.02 – Pre-Startup Safety Review (PSSR). Use MSLive/Livelink and Accounting inventories to restore facility records.
 - Public Drives are backed-up using Williams IT Security systems.
 - The Area Operations Supervisor will notify the SOC and Pipeline Control of the estimated timeline for resuming operations at the site.

Tornado

TORNADO
<p>Williams RMM: Tornado</p> <p>• Approaching tornado should be anticipated. Williams Employees will monitor the potential hazardous weather on weather apps, the internet (consider using: https://www.weather.gov/bgm/), an emergency radio (where available), television, or other</p>

means of communications whenever storms are possible. Appropriate action should be taken to protect oneself.

- Seek shelter within site control room or vehicles with a hard metal top and sides. Do not seek shelter in small, unprotected buildings, sheds, tents, compressor buildings, electrical buildings (MCC) or temporary shelters. Generally, all installed gathering, processing, and compression equipment is grounded but is NOT considered safe to work on equipment or shelter in place within in a compressor or MCC building during lightning events
- From Primary Control Center, sound the emergency siren and activate strobe light, if applicable.
- Account for all personnel on duty.
- Direct all non-essential personnel to the facility control room to sign out and leave the facility to seek shelter in an unaffected area. (This assumes that there is advanced warning and leaving would be a safe action).
- Shutdown all truck loading/unloading activities.
- Begin isolating all non-essential equipment.
- Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown. Contact pipeline control if necessary.
- Consider shutting down the facility through normal shutdown procedures. If there are time constraints or unsafe conditions (hail, lightning), use ESD.
- Notify Pipeline Control of plan to ESD Facility 918-573-7408
- ESD Facility (Operators discretion).
- While completing the above steps, remain alert for signs of an approaching tornado such as funnel formations on or near the ground, a dark (often greenish) sky, large hail, or a loud roar like a freight train.
- Take shelter.
- If a tornado or other weather-related event does pass through the area, report to the appropriate muster point as listed in the ERP. This is to be done only after the weather emergency has passed and it is safe to be in the open.
- If necessary, implement the Emergency Response Plan for any damage that has occurred because of a tornado or other severe weather-related event such as spills, fires, explosions, downed power lines, etc.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Provisions for supplies of necessities for those sheltered in place:

Tornado shelter not stocked; used for temporary occupancy only.

If Shelter is not available, check path of travel and move vehicle in a safe path of travel.

Emergency Response Kits are in most of the assigned company vehicles.

First aid kits, eyewash stations or eyewash bottles, and Automated Emergency Defibrillators are in all control rooms. In addition, first aid kits and fire extinguishers are maintained in all company vehicles.

The incident commander is responsible for distribution of emergency supplies when an emergency warrants. The inventory coordinator and SOAs will maintain the emergency water/food supplies and the Safety Officer will manage the emergency equipment maintenance.

Tornado, Continued

TORNADO, CONTINUED
Employee:
<p>Monitoring:</p> <p>Monitor for potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App; <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. ■ Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ NOAA emergency radio. ◦ Wireless Emergency Alerts (WEAs): <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alert authorities that can broadcast from cell towers to any WEA-enabled mobile device in a local targeted area. ◦ Television. ◦ Other means of communications.
<p>Preparedness:</p> <ul style="list-style-type: none"> • Identify location of on-site storm shelter or safe room/area. <ul style="list-style-type: none"> ◦ Refer to OSHA's Tornado Preparedness and Response website for guidance. ◦ An underground area, such as a basement or storm cellar, provides the best protection from a tornado. ◦ Provide signage for designated area, as needed. • If an underground shelter is unavailable, consider the following: <ul style="list-style-type: none"> ◦ Seek a small interior room or hallway on the lowest floor possible. ◦ Utilize rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead. ◦ Stay away from doors, windows, or outside walls. ◦ Stay in the center of the room, and avoid corners because they attract debris. • Identify locations where personnel should NOT seek shelter during this type of emergency (i.e. vehicles, pipe racks, portable buildings, etc). <ul style="list-style-type: none"> ◦ Avoid auditoriums, cafeterias, and gymnasiums that have flat, wide-span roofs.

Tornado, Continued

TORNADO, CONTINUED
Employee, Continued
List designated safe areas at the site:
Provide signage, as needed, to indicate the location of safe rooms/areas.
<p>Tornado Weather Definitions:</p> <ul style="list-style-type: none"> • Tornado Watch: <ul style="list-style-type: none"> ◦ Tornadoes are possible in and near your area. Be ready to act fast! ◦ During these storms, heavy rains, lightning, flash flooding and hail are possible. • Tornado Warning: <ul style="list-style-type: none"> ◦ TAKE IMMEDIATE ACTION! A tornado is near. There is danger. ◦ Move to a safe location right away. ◦ You may have only minutes or seconds to take shelter.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Limit driving to critical operations in potential tornado weather conditions. <ul style="list-style-type: none"> ◦ If driving is required, plan the safest route. • Take preliminary action to secure the facility before the weather deteriorates. <ul style="list-style-type: none"> ◦ Consider possible projectiles: <ul style="list-style-type: none"> ■ Unsecured doors (swinging or overhead) ■ Tools, containers, etc. ◦ Shutdown the facility per operating procedures by trained and competent personnel. ◦ Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown. ◦ Contact pipeline control, if necessary.
<p>If tornado sirens are activated in the area:</p> <ul style="list-style-type: none"> • Seek shelter immediately. • Evaluate weather warnings. • Immediately notify all on-site personnel of an actual tornado or a watch/warning. • Assign person to obtain site roster to enable quick accountability of all personnel following the emergency.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • If advance notification allows: <ul style="list-style-type: none"> ◦ From Primary Control Center, sound the emergency siren and activate strobe light, if applicable. ◦ Ensure a current knowledge of all personnel (employees, contractors, others) on site at the station or at remote sites to account for all personnel after the event subsides. • When personnel become aware of a tornado: <ul style="list-style-type: none"> ◦ If inside a building: <ul style="list-style-type: none"> ■ Move to an identified safe room/area if time allows. ■ If there is no designated room/area or there is no time to get there: <ul style="list-style-type: none"> ■ Move to an interior room on the lowest level of the building. ■ Stay away from outside walls, doors and windows. ◦ If outside: <ul style="list-style-type: none"> ■ If possible, immediately get to a sturdy building. ■ If it is not possible to reach a building, get to a low, flat area. ■ Do NOT get under an overpass or bridge, or in a culvert. ■ Lie down on your stomach and cover your head and neck. ■ Consider using any available PPE for added protection. ◦ If in a vehicle: <ul style="list-style-type: none"> ■ If possible, immediately get to sturdy building. ■ Do NOT get under an overpass, bridge, or in a culvert. ■ Put on a seatbelt and cover your head and neck. • When safe to do so, update the Area Operations Supervisor, Operations Manager, Local Safety Representative and Pipeline Gas Control of impending weather or weather effects on personnel, facilities, or operations.

Tornado, Continued

TORNADO, CONTINUED	
Employee; Continued	
After the storm passes:	
<ul style="list-style-type: none">• Account for all personnel that were on-site during the storm.• Remain aware of and stay clear of potential hazards.<ul style="list-style-type: none">◦ Stay clear of impacted structures until evaluated for safety.◦ Exposed power or utility lines.◦ Hazardous materials (fumes, liquids, hissing sounds).◦ Debris.◦ Water sources - maybe contaminated. water lines maybe compromised or weakened.◦ Roadways and bridges maybe impassable.• If trapped due to debris:<ul style="list-style-type: none">◦ Avoid breathing dust or fumes. Cover your mouth with a cloth, mask or your hand.◦ Try to attract attention by making a call/text, banging on a pipe or wall, or using a whistle or shouting.	
Assign specific personnel to inspect systems for damage and report any damage to Primary Control Center.	

Severe Storm

SEVERE STORM

Williams RMM

Severe Storm with Damaging Winds

In the event that the NWS issues a Tornado Warning or a Severe Thunderstorm Warning with damaging winds for the immediate area, or warnings are issued for an adjacent county and the projected path includes the immediate area, these are steps to follow for the following facility at Conway: <https://www.weather.gov/bgm/>,

- From Control Room, sound the emergency siren and activate strobe light.
- Account for all personnel on duty.
- Direct all non-essential personnel to the facility control room to sign out and leave the facility to seek shelter in an unaffected area. (This assumes that there is advanced warning and leaving would be a safe action).
- Shutdown all truck loading/unloading activities.
- Begin isolating all non-essential equipment.
- Communicate with other facilities/energy companies to plan the shutdown of product movements and make them aware of possible plant/facility shutdown.
- Consider shutting down the facility through normal shutdown procedures. If there are time constraints or unsafe conditions (hail, lightning), use ESD.
- Notify Pipeline Control of plan to ESD Facility. 918-573-7408
- ESD Facility (Operators discretion).
- While completing the above steps, remain alert for signs of an approaching tornado such as funnel formations on or near the ground, a dark (often greenish) sky, large hail, or a loud roar like a freight train.
- Take shelter.
- If a tornado or other weather-related event does pass through the area, report to the appropriate muster point as listed in the ERP. This is to be done only after the weather emergency has passed and it is safe to be in the open.
- If necessary, implement the Emergency Response Plan for any damage that has occurred because of a tornado or other severe weather-related event such as spills, fires, explosions, downed power lines, etc.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Thunderstorms are dangerous storms with lightning. A lightning strike can be fatal. Thunderstorms often bring powerful winds that can knock down trees, power lines, and mobile homes, intense rainfall that causes flash floods, tornadoes, lightning strikes that can spark fires, as well as damaging hail.

Severe Storm, Continued

SEVERE STORM, CONTINUED
Employee:
<p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App: <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ Wireless Emergency Alerts (WEAs); <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. ◦ NOAA emergency radio ◦ Television ◦ Other means of communications
<p>Severe Weather Definitions:</p> <ul style="list-style-type: none"> • Severe Thunderstorm Watch: <ul style="list-style-type: none"> ◦ Indicates the atmosphere is favorable for the development of severe thunderstorms. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio or television for information. • Severe Thunderstorm Warning: <ul style="list-style-type: none"> ◦ Issued when severe weather has been reported by spotters or indicated by radar. ◦ Warnings indicate imminent danger to life and property to those in the path of the storm.
<p>Severe Weather Hazards:</p> <ul style="list-style-type: none"> • Electrocutation <ul style="list-style-type: none"> ◦ Death caused by electric shock, like a lightning strike. • Power Surge <ul style="list-style-type: none"> ◦ A spike, or huge quick increase, in the amount of electricity coming through a power line.
<p>Preparedness:</p> <ul style="list-style-type: none"> • Where personnel or contractors are expected to be stationed during a severe weather event, consider availability of: <ul style="list-style-type: none"> ◦ Food - canned goods (with can opener) and perishable goods ◦ Water ◦ Warm, dry clothing/blankets ◦ Cots/bedding/sleeping bags

Severe Storm, Continued

SEVERE STORM, CONTINUED
Employee; Continued
<p>Pre-Event Actions – Equipment</p> <ul style="list-style-type: none"> • Generally, all installed pipeline and compression equipment is grounded and protected from the effects of severe weather and lightning. • Take preliminary action to secure all facilities before the weather deteriorates. Identify and secure any materials that may become projectiles. • Consider whether to have generators on standby to be used at Meter Stations or remote facilities. • Top-off all portable fuel cans. • Verify availability of tools and portable lighting. • Consider whether to have portable equipment on stand-by. • Make sure vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ◦ Top off fuel ◦ Top off windshield washing fluid ◦ Jumper cables ◦ First aid kit ◦ Dry, warm clothes/blanket ◦ Emergency food and water ◦ Emergency flares/lights/strobes ◦ Operable radio or cell phone (with appropriate charger) • Place generators on standby or proactively operate in case of a power outage. • Close all valves on product and additive storage tanks, if appropriate. • Top-off all portable fuel cans. • If lightning is expected: Unplug appliances and other delicate electronics.
<p>Area Operations Supervisor/Manager Actions:</p> <ul style="list-style-type: none"> • Evaluate severe weather warnings. • Instruct employees (to include temporary and contractors) to delay travel or leave early as needed. • Ensure a current knowledge of all personnel (including temporary and contractors) on site at the station or at remote sites in order to account for all personnel after the event subsides. • Provide additional guidance as necessary.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Postpone outdoor activities if the forecast calls for thunderstorms. • Shelter in place. • ESD and blow down equipment when requested by local authorities.

Severe Storm, Continued**SEVERE STORM, CONTINUED****Employee; Continued**

General Instructions for Personnel:

- When thunder is heard:
 - Seek shelter inside a secure building and move to a basement or an interior room on the lowest floor.
 - Stay away from glass windows and doors.
 - Stay inside until weather forecasts indicate it is safe to leave.
 - While Compressor buildings are grounded, they are not appropriate shelters in event of severe weather. All work must stop and personnel report to a safe location.
 - Use the 10/30 lightning safety rule: Using a Lightning Strike app on a computer or cellular phone (WeatherBug or weather.gov), identify when lightning is within 10 miles of the location.
 - If a lightning strike occurs within a 10-mile radius of the work location, cease all outdoor activities immediately and direct all employees to a safe location.
 - Do not resume work for a minimum of 30 minutes. If another strike occurs within a 10-mile radius within the 30-minute wait period, then the 30-minute clock re-starts.
- Lightning can be dangerous even inside a building.
 - Avoid using devices connected to electrical outlets or landline phones.
 - Avoid running water. Lightning can travel through plumbing and water lines.
- Remember, no place outside is safe when thunderstorms are in the area. If you are caught outside in a thunderstorm, keep moving toward a safe shelter.
- Never take shelter under a tree; this is the leading cause of death from lightning strikes. You could also be killed or injured by strong winds blowing down trees and branches.
- Limit driving to critical operations in serious weather conditions. If driving is required, employees should plan the safest route.
- Being in a vehicle is safer than being outside; however, if you have time, drive to the closest sturdy building, and take shelter inside.
- If driving and unable to get to a sturdy building:
 - Pull off the road and park in a location away from trees and power lines.
- Flash flooding happens quickly. Move to higher ground before floodwaters reach you.
 - Never walk, swim, or drive through floodwater. Turn Around! Don't Drown!
- DO NOT attempt to fight a fire beyond the incipient stage.

Severe Storm, Continued

SEVERE STORM, CONTINUED	
Employee; Continued	
Post-Event Actions:	
<ul style="list-style-type: none">• Watch for fallen power lines and trees.• Be aware that damaged trees and limbs may continue to fall after the storm is over.	

Flooding

FLOODING

Williams RMM

Flooding due to Heavy Rain

Control room operators will monitor the situation on the emergency radio, NOAA weather radios, and/or television whenever flooding is possible. If flooding is imminent: <https://www.weather.gov/bgm/>,

- Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762
- Establish an evacuation plan and routes if roads are covered with standing water DO NOT Proceed.
- Take preliminary action to secure the facility before it floods. Emergency actions.
- Consider whether to obtain portable pumps and hoses from local suppliers or from other MCFS locations in the area.
- Keep at least a normal bottom in all above ground tanks, more if possible.
- Plug all rack drains and facility drains connected to the sump, if safe to do so.
- Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks, if safe to do so.
- Shut down high-voltage power and block in natural gas, if safe to do so.
- Close all valves on product and additive storage tanks, if safe
- Before evacuation, know where all the employees will be residing and obtain phone numbers so that they can be contacted should additional emergencies occur.
- Initiate Emergency Response Plan if the flood causes spills, fires, or explosions.
- If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Flooding is a temporary overflow of water onto land that is normally dry. Floods are the most common natural disaster in the United States. Failing to evacuate flooded areas or entering flood waters can lead to injury or death.

Floods may result from rain, snow, coastal storms, storm surges and overflows of dams and other water systems. They may develop slowly or quickly. Flash floods can come with no warning. Floods may cause outages, disrupt transportation, damage buildings, and create landslides.

Flooding, Continued

FLOODING, CONTINUED
Employee:
<p>Monitoring: Determine the likelihood of flooding by determining whether the site lies within a floodplain. Refer to FEMA Flood Map Service Center.</p> <p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App: The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. • Wireless Emergency Alerts (WEAs): WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. • NOAA emergency radio • Television • Other means of communications
<p>Flood Weather Definitions:</p> <ul style="list-style-type: none"> • Flood Advisory: <ul style="list-style-type: none"> ◦ Be Aware. A Flood Advisory is issued when a specific weather event that is forecast to occur may become a nuisance. A Flood Advisory is issued when flooding is not expected to be bad enough to issue a warning. However, it may cause significant inconvenience, and if caution is not exercised, it could lead to a situation that may threaten life and/or property. Typically issued for the possibility of Minor Flooding. • Flood Watch: <ul style="list-style-type: none"> ◦ Be Prepared. A Flood Watch is issued when conditions are favorable for a specific hazardous weather event to occur. A Flood Watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is possible. • Flood Warning: <ul style="list-style-type: none"> ◦ Take Action! A Flood Warning is issued when the hazardous weather event is imminent or already happening. A Flood Warning is issued when flooding is imminent or occurring. Typically issued for the possibility of Moderate or Major Flooding. • Flash Flood Warning: <ul style="list-style-type: none"> ◦ Take Action! A Flash Flood Warning is issued when a flash flood is imminent or occurring. If you are in a flood prone area move immediately to high ground. A flash flood is a sudden violent flood that can take from minutes to hours to develop. It is even possible to experience a flash flood in areas not immediately receiving rain. • Stage: <ul style="list-style-type: none"> ◦ The level of the water surface of a river or stream above an established gage datum at a given location. • Flood Stage <ul style="list-style-type: none"> ◦ An established gage height for a given location above which a rise in water surface level begins to create a hazard to lives, property, or commerce. The issuance of flood advisories or warning is linked to flood stage. • Turn Around, Don't Drown®: <ul style="list-style-type: none"> ◦ Each year, more deaths occur due to flooding than from any other thunderstorm related hazard, half of which result occurring when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths is due to walking into or near flood waters. People underestimate the force and power of water. Never drive around the barriers blocking a flooded road. The road may have collapsed under that water. A mere 6 inches of fast-moving flood water can knock over an adult. It takes just 12 inches of rushing water to carry away most cars and just 2 feet of rushing water can carry away SUVs and trucks. It is NEVER safe to drive or walk into flood waters.
<p>NOTE: The definitions listed are used by the National Weather Service. Other jurisdictions may use other terminology for these same conditions.</p>

Flooding, Continued

FLOODING, CONTINUED	
Employee; Continued	
Flood Hazards:	
<ul style="list-style-type: none"> • Coastal flooding: <ul style="list-style-type: none"> ◦ Generally occurs with a land-falling or near-land system such as a Tropical Storm or Hurricane. Storm surge and large waves produced by hurricanes pose the greatest threat to life and property along the coast. The destructive power of storm surge and large battering waves can result in loss of life; destruction of buildings; erosion of beaches and dunes; and damage to roads and bridges along the coast. Storm surges undermine building foundations by constant agitation of the water piled high by the tropical cyclone. The result can be a complete demolition of homes and businesses. Storm surge can also travel several miles inland causing additional flooding and destruction. • River flooding: <ul style="list-style-type: none"> ◦ Occurs when river levels rise and overflow their banks or the edges of their main channel and inundate areas that are normally dry. The NWS issues Flood Warnings for designated River Forecast Points where flood stage has been established. Local jurisdictions may use differing terminology. River flooding is classified as follows: <ul style="list-style-type: none"> ■ Minor – Means that low-lying areas adjacent to the stream or river, mainly rural areas and farmland and secondary roadways near the river flood. ■ Moderate – Means water levels rise high enough to impact homes and businesses near the river and some evacuations may be needed. Larger roads and highways may also be impacted. ■ Major – Means that extensive rural and/or urban flooding is expected. Towns may become isolated and major traffic routes may be flooded. Evacuation of numerous homes and businesses may be required. ■ Record – Means that the water reaches a level higher than it has ever been recorded before. It can cause extensive damage or even no damage or other negative impacts. • Burn Scars/Debris Flows: <ul style="list-style-type: none"> ◦ In areas where wildfires have occurred, vegetation may have burned away and soil properties altered, leaving behind bare ground that tends to repel water. This is called a burn scar, and as rain falls over it, the ground is unable to absorb the water. It either collects or runs off to the lowest point. Without vegetation to hold the soil in place, flooding can produce mud and debris flows. When normally dry soil becomes overly saturated, it can even reach the point where it turns to a liquid state and flows downhill, essentially becoming a river of mud, which can destroy buildings, wash out bridges and roadways and knock down trees. • Ice/Debris Jams: <ul style="list-style-type: none"> ◦ In rivers, as ice or debris moves downstream, it may get caught on any obstruction to the water flow. When this occurs, water can be held back, causing upstream flooding. When the jam finally breaks, flash flooding can occur downstream. 	

Flooding, Continued

FLOODING, CONTINUED
Employee, Continued
<p>Preparedness:</p> <ul style="list-style-type: none"> • Consider availability of all items listed in the Preparedness Kit, but with specific emphasis on: <ul style="list-style-type: none"> ◦ Food - canned goods (with can opener) and perishable goods ◦ Water ◦ Dry, warm clothing/blankets ◦ Cots/bedding/sleeping bags
<p>Consider Pre-Event Actions:</p> <ul style="list-style-type: none"> • Take preliminary action to secure all facilities before the weather deteriorates. • Assess the presence of any materials on-site that may be displaced by rising water levels (timber mats, skids, work equipment, etc). • Inspect drainage facilities to ensure no blockage or flow restrictions. • Consider whether to have sandbags brought to site. • Consider whether to obtain portable pumps and hoses from local suppliers or from other locations in the area. • Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks. • Inspect secondary containment components for any potential releases. • Shut all valves if not in use. • Evaluate shutdown of high-voltage power and block in natural gas per operating procedures and by trained and competent personnel. • Place generators on standby or proactively operate in case of a power outage. • Close all valves on product and additive storage tanks, if appropriate. • Top-off all portable fuel cans. • Determine the need to have portable equipment on stand-by. • Remove or secure assets such as files, computers, and spare parts, if safe to do so. • Attach a buoy with valve number marking to each valve with 25 ft. of rope to all crossovers and block valves. • Coordinate with Emergency Responders on pipeline location and condition. Provide maps and other relevant information to such responders. • Coordinate with other pipeline operators in the flood area and establish emergency response centers to act as a liaison for pipeline problems and solutions. • Deploy employees so that they will be in a position to take emergency actions, such as shutdown, isolation, or containment.

Flooding, Continued

FLOODING, CONTINUED
Employee, Continued
<p>Area Operations Supervisor/Manager Actions:</p> <ul style="list-style-type: none"> • Evaluate weather warnings. • Schedule personnel to be stationed at critical facilities in preparation for severe weather as needed. <ul style="list-style-type: none"> ◦ Distribute emergency food and water to areas where personnel will be stationed. • Instruct Employees (to include temporary and Contractors) to delay travel or leave early as needed, as well as the following considerations. <ul style="list-style-type: none"> ◦ Be aware of the location of all personnel (employees, contractors, others) on site at the station or at remote sites to account for all personnel after the event subsides. ◦ Prior to evacuation: <ul style="list-style-type: none"> ■ Know where all the employees will be residing and obtain phone numbers so that they can be contacted if additional emergencies occur.
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Evacuation: <ul style="list-style-type: none"> ◦ Learn and practice evacuation routes, shelter plans, and flash flood response. ◦ If possible, go to the designated safe location. If told to evacuate, do so immediately. ◦ Never drive around barricades. Local responders use them to safely direct traffic out of flooded areas. ◦ Do not walk, swim, or drive through flood waters. <ul style="list-style-type: none"> ■ Turn Around, Don't Drown®. Just six inches of fast-moving water can knock you down, and one foot of moving water can sweep your vehicle away. ◦ Stay off bridges over fast-moving water. Fast-moving water can wash bridges away without warning. ◦ If your vehicle is trapped in rapidly moving water, stay inside. If water is rising inside the vehicle, seek refuge on the roof. • Shelter in Place: <ul style="list-style-type: none"> ◦ If the site is above the expected flood stage with lower lying areas surrounding, it may be safe to shelter in place, especially for flash flood events. ◦ If trapped in a building, go to its highest level. <ul style="list-style-type: none"> ■ Do not climb into a closed attic. You may become trapped by rising floodwater. ■ Go on the roof only if necessary. Signal for help.

Flooding, Continued

FLOODING, CONTINUED
Employee, Continued
<p>During Event - Actions to Consider:</p> <ul style="list-style-type: none"> • Always put generators outside well away from doors, windows and vents. • Determine the operability of all company vehicles. • Limit driving to critical operations during and immediately after a flood event. • Evaluate the accessibility of pipeline facilities that may be in jeopardy, such as valve settings, which are needed to isolate water crossings or other sections of a pipeline. • Determine if facilities that are normally above ground (e.g. valves, regulators, relief stations, etc.) have become submerged and are in danger of being struck by vessels or debris; if possible, such facilities should be marked with an appropriate buoy with Coast Guard approval. • Keep at least a normal bottom in all above ground tanks, more if possible. • Perform frequent patrols, including appropriate overflights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. • Determine if flooding has exposed or undermined pipelines because of new river channels cut by the flooding or by erosion or scouring.
<p>Post Event - Actions to Consider:</p> <ul style="list-style-type: none"> • If patrols and depth surveys indicate the existence of a hazard to normal land use activities. <ul style="list-style-type: none"> ◦ Share information with affected landowners. • Make sure line markers are still in place or replaced in a timely manner. • Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover. • If a pipeline has suffered damage, is shut-in, or is being operated at a reduced pressure as a precautionary measure because of flooding: <ul style="list-style-type: none"> ◦ Refer to 07.16.01.07 - DOT Regulatory Reporting Requirements. • Inspect riverbank and area between river and valve setting for damaged ROW or exposed pipe. • Fully inspect and service valve operators and valves per manufacturer's recommendations. • Determine if any underground storage tank (UST) systems have become displaced or damaged and release their contents into the environment, causing soil, surface water, and groundwater contamination. • Pressure wash valve settings and inspect coatings. • Replace locks that may be damaged by water. • Inspect and repair fencing as needed. • Secure site assets to prevent theft or vandalism.

Flooding, Continued**FLOODING, CONTINUED****Employee; Continued**

General Instruction for Personnel:

- Avoid contact with flood water due to potentially elevated levels of contamination associated with raw sewage and other hazardous or toxic substances that may be in the flood water.
- Avoid or limit direct contact with contaminated flood water.
- Wash hands frequently with soap, especially before drinking and eating.
- Boiling water:
 - To kill all major water-borne bacterial pathogens, bring water to a rolling boil for 1 full minute.
- Mold cleanup:
 - Mold can cause serious health problems. The key to mold control is moisture control.
 - After the flood, remove standing water and dry indoor areas. Remove and discard anything that has been wet for more than 24-48 hours.
- Mosquitos can sharply increase after a flood.
 - As flood waters recede be sure to drain, overturn, or empty areas – no matter how small – to reduce mosquito breeding areas and help reduce the spread of mosquito-borne diseases.
- Be aware that snakes and other animals may be in a building. Wear heavy gloves and boots during clean up. Avoid wading in floodwater, which can contain dangerous debris and be contaminated. Underground or downed power lines can also electrically charge the water.
- If needed, use a generator equipped with GFCI or other propane or gasoline-powered machinery ONLY outdoors and away from windows.
- Be aware of the risk of electrocution. Do not touch electrical equipment if it is wet or if you are standing in water.
 - If it is safe to do so, turn off the electricity to prevent electric shock.

Winter Weather

WINTER WEATHER
Employee:
<p>Monitor potential hazardous weather using, as applicable:</p> <ul style="list-style-type: none"> • Radio • Weather apps: <ul style="list-style-type: none"> ◦ https://www.weather.gov, with local zip code ◦ FEMA Mobile App <ul style="list-style-type: none"> ■ The FEMA App allows you to receive real-time weather and emergency alerts, send notifications to loved ones, locate emergency shelters in your area, get preparedness strategies and more. ■ Receive real-time weather and emergency alerts from the National Weather Service for up to five locations nationwide. ◦ Wireless Emergency Alerts (WEAs): <ul style="list-style-type: none"> ■ WEAs are short emergency messages from authorized federal, state, local, tribal and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. ◦ NOAA emergency radio ◦ Television ◦ Other means of communications
<p>Winter Weather Definitions</p> <ul style="list-style-type: none"> • Winter Weather Advisory <ul style="list-style-type: none"> ◦ Issued for accumulations of snow, freezing rain, freezing drizzle, and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life-threatening situations. • Winter Storm Watch <ul style="list-style-type: none"> ◦ Alerts the public to the possibility of a blizzard, heavy snow, heavy freezing rain, or heavy sleet. Winter Storm Watches are usually issued 12 to 48 hours before the beginning of a Winter Storm. • Winter Storm Warning: <ul style="list-style-type: none"> ◦ Issued when hazardous winter weather in the form of heavy snow, heavy freezing rain, or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin. • Ice Storm Warning: <ul style="list-style-type: none"> ◦ Heavy ice accumulations are imminent and the criteria for amounts vary over different county/parish warning areas. Accumulations range from 1/4 to 1/2 inch or more of freezing rain. • Freezing Rain Advisory: <ul style="list-style-type: none"> ◦ A trace to 1/4 inch (1–6 mm) of expected freezing rain is needed in any county warning area to prompt a freezing rain advisory. • Freeze Warning: <ul style="list-style-type: none"> ◦ Widespread temperatures at or below 32 °F. • Hard Freeze Warning: <ul style="list-style-type: none"> ◦ Widespread temperatures at or below 28 °F.

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee; Continued
<p>Hazards:</p> <ul style="list-style-type: none"> • Frostbite causes loss of feeling and color around the face, fingers, and toes. • Hypothermia is an unusually low body temperature. A temperature of below 95° is an emergency. • Slick or unpassable roads • Becoming stranded • Poor visibility due to blowing snow • Falling trees or limbs due to ice or wind • Carbon monoxide poisoning
<p>Preparedness:</p> <ul style="list-style-type: none"> • Where personnel or contractors are expected to be stationed during severe winter weather, consider availability of: <ul style="list-style-type: none"> ◦ Food - canned goods (with can opener) and perishable goods ◦ Water ◦ Warm, dry clothing/blankets ◦ Cots/bedding/sleeping bags • Ensure that all Winterization PMs have been conducted on all vehicles and equipment for the site: <ul style="list-style-type: none"> ◦ Verify coolant, antifreeze, and oil levels in fixed equipment: <ul style="list-style-type: none"> ■ Air/gas compressors ■ Lube Oil Cooling Water (LOCW) System ■ Compressor Station piping ■ Verify coolants levels in mobile equipment, such as skid steer, tractor, etc. (50/50 Anti-freeze mixture is -34° F.) ■ Confirm operability of heating equipment (heat trace, building heaters, etc.). ■ Drain water from all valves that would be affected by freezing weather. ■ Wrap all valves and water piping that would be affected by freezing weather. ■ Drain pump and pull plug at oil and water separator. ■ All equipment found to be or brought up to satisfactory protective temperatures. ■ Verify compressor unit coolant levels and coolant/oil standby (day) tank levels. <p>NOTE: If the site has a leased compressor unit, verify the lease company completes these functions ahead of impending weather.</p> <ul style="list-style-type: none"> • Make sure supplies are staged for working in freezing conditions and addressing frozen equipment. Consider: <ul style="list-style-type: none"> ◦ Plows on vehicles ◦ Salt ◦ Heating equipment - fire resistant or canvas tarps, heaters, hoses ◦ Temporary heat trace ◦ Diesel fuel

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee:, Continued
<p>Responsibilities—Manager, Operations:</p> <ul style="list-style-type: none"> • Review forecasted load expectations to determine if winter weather is expected to create high demand across the system or regionally. • Evaluate weather warnings. • At least 5 days before extreme weather is forecasted: <ul style="list-style-type: none"> ◦ begin discussing with VP/Director, Operations to confirm areas are making necessary preparations at facilities expected to be impacted. • At least 3 days before extreme weather is forecasted: <ul style="list-style-type: none"> ◦ make a final decision with Supervisor, Operations and appropriate support services on which facilities will be required to be staffed based on anticipated system conditions. ◦ hold a meeting with local team to cover preparedness actions and response expectations, as applicable: <ul style="list-style-type: none"> ■ Staffing, office closures, and adjusted hours. ■ If required, adjust the work schedules to provide adequate personnel and coverage for each shift. <ul style="list-style-type: none"> ■ Communication method and frequency. ■ Inspections/tasks to complete to prepare for the storm. ■ Inspections/tasks to complete during the storm. ■ Instruct employees to delay travel or leave early as needed. <p>NOTES:</p> <ul style="list-style-type: none"> ■ Response will vary depending on location and expected weather impacts. ■ Decision to staff a station will be based on numerous factors, but should be considered especially when dramatic temperature drop, heavy snow fall, or ice precipitation is anticipated. ■ Consider implementing schedule prior to event to make sure teams are on correct schedule.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Vehicles <ul style="list-style-type: none"> ◦ Make sure vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ■ Top off fuel ■ Check battery ■ Check antifreeze in cooling system (50/50 Anti-freeze mixture in -34° F) ■ Check tire tread ■ Top off Windshield Washing Fluid ■ Jumper Cables ■ Tow straps/chains (if applicable) ■ First Aid Kit ■ Emergency flares/lights/strobes ■ Operable radio or cell phone, with extra batteries and/or charger ■ Emergency thermal blanket ◦ Limit driving to business-critical operations in serious winter weather conditions. If driving is required, employees should plan the safest routes using recently plowed roads. • FACILITY/BUILDINGS: <ul style="list-style-type: none"> ◦ Take preliminary action to secure the facility before the weather deteriorates. ◦ Place generators on standby or proactively operate in case of a power outage. ◦ Drip water in all sinks to keep pipes from freezing. ◦ Close all valves on product and additive storage tanks, if applicable. ◦ Top-off all portable fuel cans.

Winter Weather, Continued

WINTER WEATHER, CONTINUED
Employee; Continued
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Limit time outside, wear layers of warm clothing. • Watch for signs of frostbite and hypothermia <ul style="list-style-type: none"> ◦ Frostbite: <ul style="list-style-type: none"> ■ Signs: Numbness, white or grayish-yellow skin, and firm or waxyskin. ■ Actions: Go to a warm room. Soak in warm water. Use body heat to warm. Do not massage or use a heating pad. ◦ Hypothermia: <ul style="list-style-type: none"> ■ Signs: Shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech, and drowsiness. ■ Actions: Go to a warm room. Warm the center of the body first - chest, neck, head and groin. Keep dry and wrapped up in warm blankets, including the head and neck. • Avoid carbon monoxide poisoning. <ul style="list-style-type: none"> ◦ If stranded while traveling, make sure that the exhaust pipe is clear of snow/debris. Regularly crack the windows for short periods. ◦ Only use generators and grills outdoors and away from windows. ◦ Never heat your work area with a gas stovetop or oven.
<p>Winter Weather Ice and Blizzard Conditions</p> <p>Control room operators will continuously monitor the situation on the emergency radio, NOAA weather radio and/or television whenever winter storms are predicted to cause ice or blizzard conditions. If conditions warrant https://www.weather.gov/bgm/</p> <ul style="list-style-type: none"> • If road conditions are not conducive to safe travel, notify supervisor for guidance. • Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762 • Take preliminary action to secure the facility before the weather deteriorates. • Distribute emergency food and water to areas where personnel will be stationed. • Consider whether to have generators on standby. • Shut down high-voltage power and block in natural gas, if appropriate. • Close all valves on product and additive storage tanks, if appropriate. • Initiate Emergency Response Plan if the ice/blizzard causes spills, fires, or explosions. • If applicable, report event to the Security Operations Center (SOC) 855-945-5762.

Wildfires

WILDFIRES
<p>Wildfire</p> <p>Consult with local fire authorities on fire path of travel and safe evacuation routes.</p> <ol style="list-style-type: none"> 1. Notify Pipeline Control as needed 918-573-7408 and contact Security Operations Center (SOC) 855-945-5762 2. ESD and blow down equipment when requested by local authorities. 3. DO NOT attempt to fight a fire beyond the incipient stage.
<p>Wildfires are unplanned fires that burn in natural areas like forests, grasslands or prairies. These dangerous fires spread quickly and can devastate not only wildlife and natural areas, but also communities.</p>
Employee:
<p>Monitoring:</p> <ul style="list-style-type: none"> • Use the Fire and Smoke Map - AirNow Fire and Smoke Map <ul style="list-style-type: none"> ◦ This map shows known fires and air quality (airborne particulates and smoke plumes) throughout the U.S. Provides by AirNow and the Interagency Wildland Fire Air Quality Response Program. • The National Weather Service - Fire Weather forecasts and warnings.
<p>Wildfire/Smoke Definitions:</p> <ul style="list-style-type: none"> • Red Flag Warning: <ul style="list-style-type: none"> ◦ Take Action. Be extremely careful with open flames. NWS issues a Red Flag Warning, in conjunction with land management agencies, to alert land managers to an ongoing or imminent critical fire weather pattern. NWS issues a Red Flag Warning when fire conditions are ongoing or expected to occur shortly. • Fire Weather Watch: <ul style="list-style-type: none"> ◦ Be Prepared. A Watch alerts land managers and the public that upcoming weather conditions could result in extensive wildland fire occurrence or extreme fire behaviors. A watch means critical fire weather conditions are possible but not imminent or occurring. • Extreme Fire Behavior: <ul style="list-style-type: none"> ◦ This alert implies a wildfire likely to rage out of control. It is often hard to predict these fires because they behave erratically, sometimes dangerously. One or more of the following criteria must be met: <ul style="list-style-type: none"> ■ Moving fast ■ High rate of spread ■ Prolific crowning and/or spotting ■ Presence of fire whirls ■ Strong convection column • Air Quality (Smoke): <ul style="list-style-type: none"> ◦ Refer to 02.05.00.08 – Wildfire Safety for Monitoring Air Quality and Employee Safety and Health Protection. Defines Air Quality Index (AQI) to determine the needs for respiratory protection requirements. • PM_{2.5}: <ul style="list-style-type: none"> ◦ Fine particle particulate matter with diameters less than 2.5 microns, commonly found in smoke and haze. PM_{2.5} particles pose a health risk due to their ability to enter the lungs and bloodstream, affecting both the lungs and heart.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee; Continued
<p>Wildfire Hazards:</p> <ul style="list-style-type: none"> • Fire: <ul style="list-style-type: none"> ◦ During large fires, the air is superheated. This can lead to difficulty breathing or even scarring of the lungs. ◦ Superheating dries out the air, increasing the combustibility of other items throughout the area, increasing the likelihood and speed of the fire spreading. • Smoke / Inhalation of smoke: <ul style="list-style-type: none"> ◦ Fine particles can be inhaled deeply into the lungs; exposure to the smallest particles (PM2.5) can affect the lungs and heart. ◦ Fine particles are respiratory irritants, and exposure to high concentrations can cause persistent cough, phlegm, wheezing, and difficulty breathing. ◦ Exposure to fine particles can affect healthy people, causing respiratory symptoms and reductions in lung function. ◦ Particle pollution may also affect the body's ability to remove foreign materials from the lungs, such as pollen and bacteria. • Ash: <ul style="list-style-type: none"> ◦ Ash may be irritating to the skin, nose, and throat, and may cause coughing. ◦ Fine particles can be inhaled deeply into lungs and may aggravate asthma and make it difficult to breathe. ◦ AVOID direct contact with ash. If you get ash on your skin, in your eyes, or in your mouth, wash it off as soon as you can. ◦ Falling ash may also still be hot enough to cause other items (vegetation, roofs, debris, etc.) to actively catch on fire. • Burn Scars/Debris Flows: <ul style="list-style-type: none"> ◦ In areas where wildfires have occurred, vegetation may have burned away and soil properties altered, leaving behind bare ground that tends to repel water. This is called a burn scar, and as rain falls over it, the ground is unable to absorb the water. It either collects or runs off to the lowest point. ◦ Without vegetation to hold the soil in place, flooding can produce mud and debris flows. ◦ When normally dry soil becomes overly saturated, it can even reach the point where it turns to a liquid state and flows downhill, essentially becoming a river of mud, which can destroy buildings, wash out bridges and roadways and knock down trees.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee:, Continued
<p>Preparedness:</p> <ul style="list-style-type: none"> • Create a fire-resistant zone that is free of leaves, debris or flammable materials for at least 30 feet from all structures or outer fencing. • Distribute emergency food and water to areas where personnel will be stationed at critical facilities. Ensure availability of: <ul style="list-style-type: none"> ◦ Food – canned goods (with can opener) and perishable goods. ◦ Water ◦ Extra clothing/blankets. ◦ Cots/bedding/sleeping bags. • Plan an evacuation route away from the site and other alternate routes in case the first route is closed or threatened by wildfire. • Designate a room that can be closed off from outside air. <ul style="list-style-type: none"> ◦ Set up a portable air cleaner to keep indoor pollution levels low when smoky conditions exist. • Use high efficiency filters in your central air conditioning system to capture fine particles from smoke.
<p>Manager Actions:</p> <ul style="list-style-type: none"> • Review forecasted load expectations to determine if weather is expected to create high demand across the system or regionally. • Evaluate wildfire alerts and warnings. and will instruct Employees to delay travel or leave early as needed. • Communicate local area evacuation routes.
<p>Pre-Event Actions:</p> <ul style="list-style-type: none"> • Take preliminary action to secure the facility before fires are within one mile of the facility. • Call for outside emergency services if not already on scene, if needed. • Cover vents. • Move flammable inventory inside. • Close all doors and windows. • Qualified Personnel will shut down high-voltage power if determined necessary. • Place generators and any other portable equipment on standby or proactively operate in case of a power outage, or any other use as needed. • Close all valves on product and additive storage tanks, if appropriate. • Secure or remove assets such as files, computers, and spare parts, if safe to do so. <ul style="list-style-type: none"> ◦ Place personal safety above asset retrieval. • Make sure company vehicles are prepared and equipped, as follows: <ul style="list-style-type: none"> ◦ Top off fuel - closely monitor fuel levels and use. ◦ Check battery ◦ Top off Windshield Washing Fluid ◦ Jumper Cables ◦ Road Map ◦ First Aid Kit ◦ Fire resistant clothes/blanket ◦ Emergency food and water ◦ Sunglasses ◦ Emergency lights/strobes ◦ Operable radio or cell phone, with extra batteries/charger ◦ Fire extinguisher • Back vehicles into parking spaces or park them in an open space facing the direction of escape. • Consider the need for dedicating a road as "ingress" only with a second road as "egress" only. • Limit driving to critical operations in serious wildfire conditions. • Begin last-minute preparations. Note that employees may need time to prep their homes as well. • Shut off gas supply to commercial property. <ul style="list-style-type: none"> ◦ It's standard practice by emergency response to shut off the gas supply to prevent feeding a fire. Doing so yourself reduces risks to your structure. • If vents are easily accessible and you do not have metal mesh covers, a lightweight noncombustible material (such as sheet metal) can be installed. These covers should be removed once the fire and ember threat passes. • Close doors and windows <ul style="list-style-type: none"> ◦ Shut all interior and exterior doors and windows and leave them unlocked. ◦ Close commercial garage doors all the way. • Shut off HVAC <ul style="list-style-type: none"> ◦ This will help prevent outside smoke from entering the building and causing preventable damage. • Leave property easily seen and accessible for firefighters. <ul style="list-style-type: none"> ◦ Leave lights on so firefighters can see the building under smoky conditions. ◦ Consider the need to open gates to allow immediate access to emergency vehicles. • Do not leave landscape sprinklers on. It can negatively affect water pressure.

Wildfires, Continued

WILDFIRES, CONTINUED
Employee:, Continued
<p>Employee Actions:</p> <ul style="list-style-type: none"> • Evacuate immediately if authorities tell you to do so. • Always evacuate if you feel it is unsafe to stay. <ul style="list-style-type: none"> ◦ DO NOT wait to receive an emergency notification if you feel threatened by a fire. • Make sure your designated contact knows your plan and how to communicate with you to know you are safe. • Know your site and local area's evacuation routes. <ul style="list-style-type: none"> ◦ You may have to evacuate quickly. ◦ Know your community's emergency response plan and have a plan for where to go. ◦ Follow instructions from local authorities. They will provide the latest recommended routes for leaving your location. • If driving is required, plan the safest route moving away from the fire. <ul style="list-style-type: none"> ◦ Consider the possibility of limited visibility due to heavy smoke. ◦ Consider the condition of roads for use by site personnel as well as emergency vehicles. • Keep your car windows up and the air conditioning on to prevent embers and smoke from entering the vehicle. • If you are not ordered to evacuate but smoky conditions exist: <ul style="list-style-type: none"> ◦ Stay inside in a safe location or go to a community building where smoke levels are lower. ◦ If your system has fresh air intake, set the system to "recirculate" mode and close the outdoor intake damper. ◦ Move to a designated room that can be closed off from outside air. Close all doors and windows. Set up a portable air cleaner to keep indoor pollution levels low when smoky conditions exist.

3.10 SECURITY RESPONSE MEASURES

3.10 Security Response Measures
Employee:
3.10.1 Refer to facility site-specific security plan or 07.50.00.01 – Physical Security.

3.11 SITE SPECIFIC EMERGENCY RESPONSE PROCEDURES

4.0 POST EMERGENCY ACTIVITIES

4.1 RESTORATION OF SERVICE

4.1 Restoration of Service
Employee:
4.1.1 Follow the appropriate SSOP, SSMP, and Pipeline Control Procedures when restoring service and returning to normal operations.

4.2 DOCUMENTATION

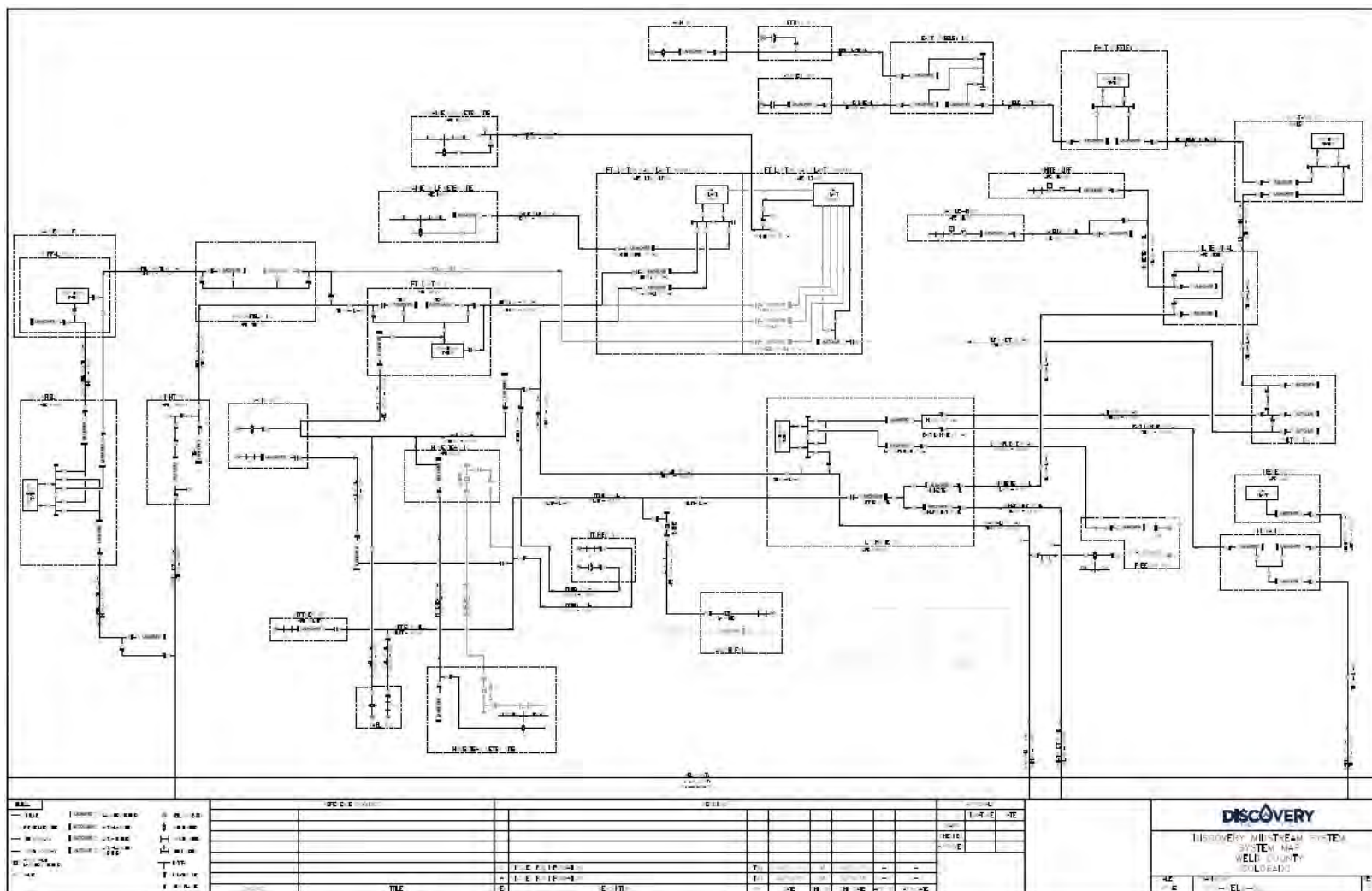
4.2 Documentation
Incident Commander:
4.2.1 Gather all necessary documentation and submit to the Safety Representative.

4.3 AFTER ACTION REVIEW (AAR)

4.3 After Action Review (AAR)
Incident Commander; Safety Representative:
4.3.1 Schedule a critique of the Emergency Response and inform affected personnel. Document the critique on <u>F10-103 - Emergency Response or Drill Documentation</u> .

ATTACHMENT A - MAPS AND DRAWINGS

[Click to view/print Discovery Midstream System - System Maps](#)



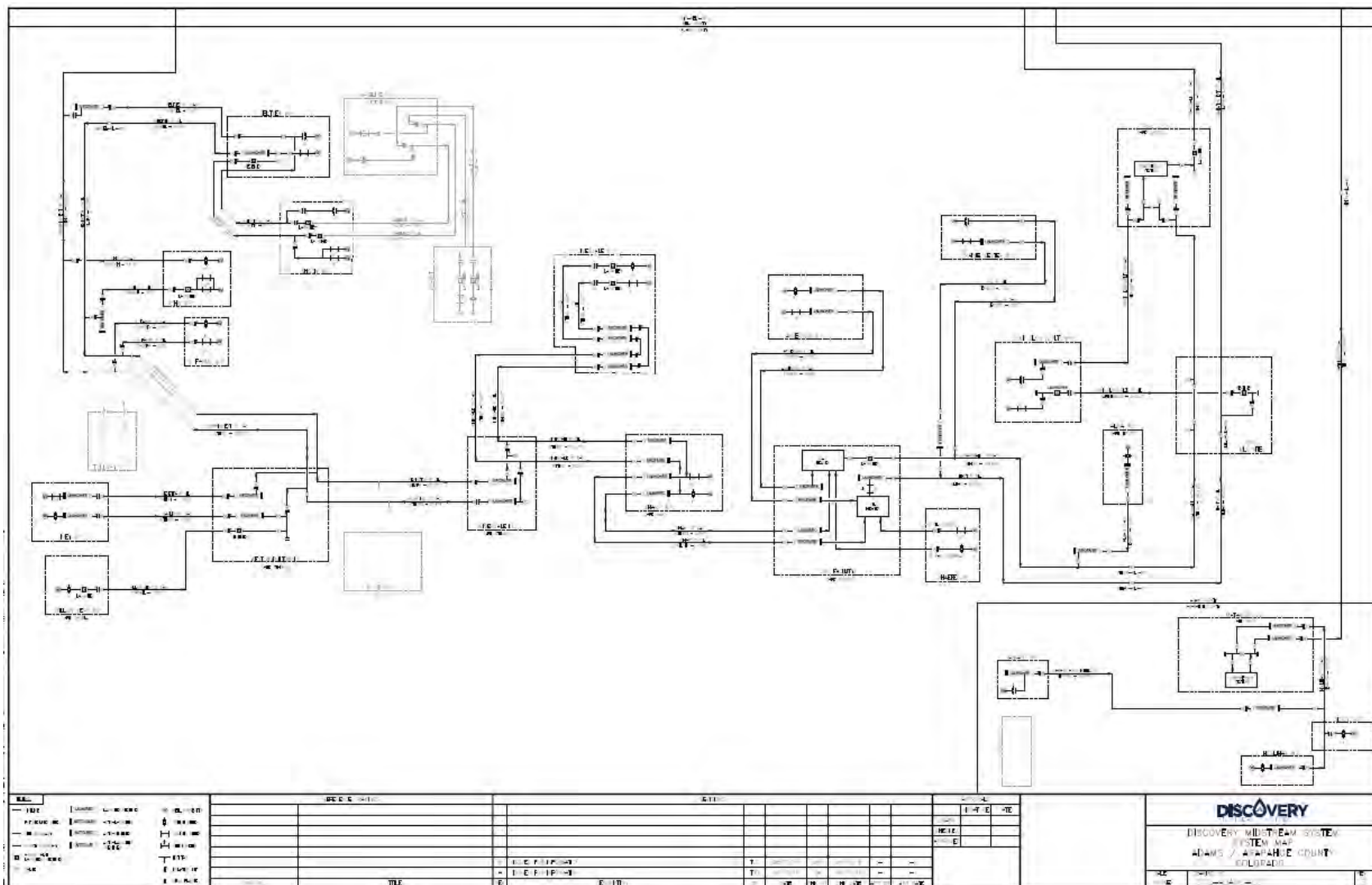
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2	REVISION TO ADD VALVE	11/11/00
3	REVISION TO ADD VALVE	11/11/00
4	REVISION TO ADD VALVE	11/11/00
5	REVISION TO ADD VALVE	11/11/00
6	REVISION TO ADD VALVE	11/11/00
7	REVISION TO ADD VALVE	11/11/00
8	REVISION TO ADD VALVE	11/11/00
9	REVISION TO ADD VALVE	11/11/00
10	REVISION TO ADD VALVE	11/11/00

NO.	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	11/11/00
2	REVISION TO ADD VALVE	11/11/00
3	REVISION TO ADD VALVE	11/11/00
4	REVISION TO ADD VALVE	11/11/00
5	REVISION TO ADD VALVE	11/11/00
6	REVISION TO ADD VALVE	11/11/00
7	REVISION TO ADD VALVE	11/11/00
8	REVISION TO ADD VALVE	11/11/00
9	REVISION TO ADD VALVE	11/11/00
10	REVISION TO ADD VALVE	11/11/00

NO.	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	11/11/00
2	REVISION TO ADD VALVE	11/11/00
3	REVISION TO ADD VALVE	11/11/00
4	REVISION TO ADD VALVE	11/11/00
5	REVISION TO ADD VALVE	11/11/00
6	REVISION TO ADD VALVE	11/11/00
7	REVISION TO ADD VALVE	11/11/00
8	REVISION TO ADD VALVE	11/11/00
9	REVISION TO ADD VALVE	11/11/00
10	REVISION TO ADD VALVE	11/11/00

DISCOVERY

DISCOVERY WEST-EAM SYSTEM
SYSTEM MAP
WELD COUNTY
COLORADO



SYMBOL	DESCRIPTION	UNIT
1.00	1.00	1.00
2.00	2.00	2.00
3.00	3.00	3.00
4.00	4.00	4.00
5.00	5.00	5.00
6.00	6.00	6.00
7.00	7.00	7.00
8.00	8.00	8.00
9.00	9.00	9.00
10.00	10.00	10.00

NO.	DESCRIPTION	UNIT
1.00	1.00	1.00
2.00	2.00	2.00
3.00	3.00	3.00
4.00	4.00	4.00
5.00	5.00	5.00
6.00	6.00	6.00
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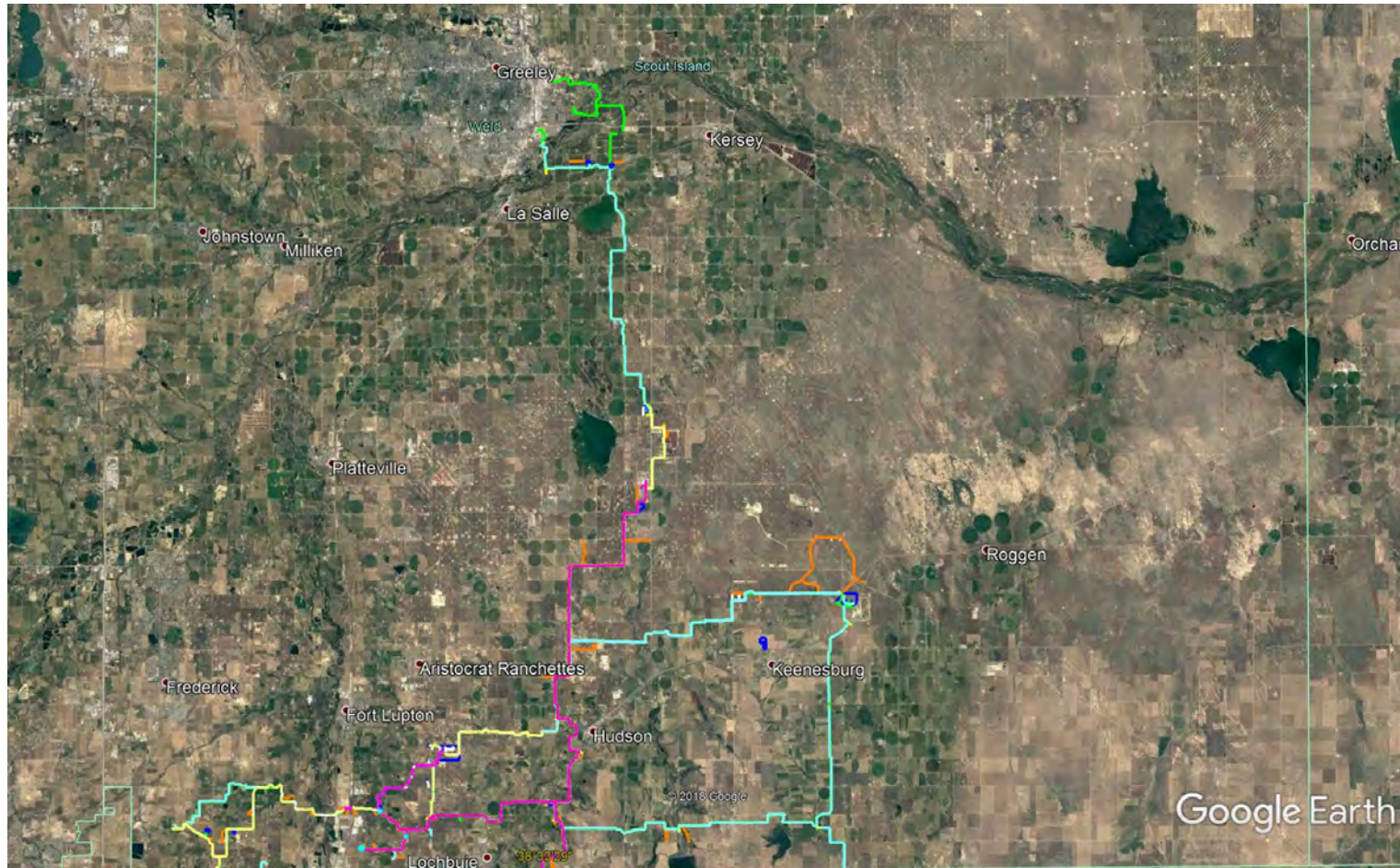
NO.	DESCRIPTION	UNIT
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2.00	2.00	2.00
3.00	3.00	3.00
4.00	4.00	4.00
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6.00	6.00	6.00
7.00	7.00	7.00
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9.00	9.00	9.00
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NO.	DESCRIPTION	UNIT
1.00	1.00	1.00
2.00	2.00	2.00
3.00	3.00	3.00
4.00	4.00	4.00
5.00	5.00	5.00
6.00	6.00	6.00
7.00	7.00	7.00
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9.00	9.00	9.00
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ATTACHMENT A - MAPS AND DRAWINGS, CONTINUED

[Click to view/print Weld County Overview Map](#)

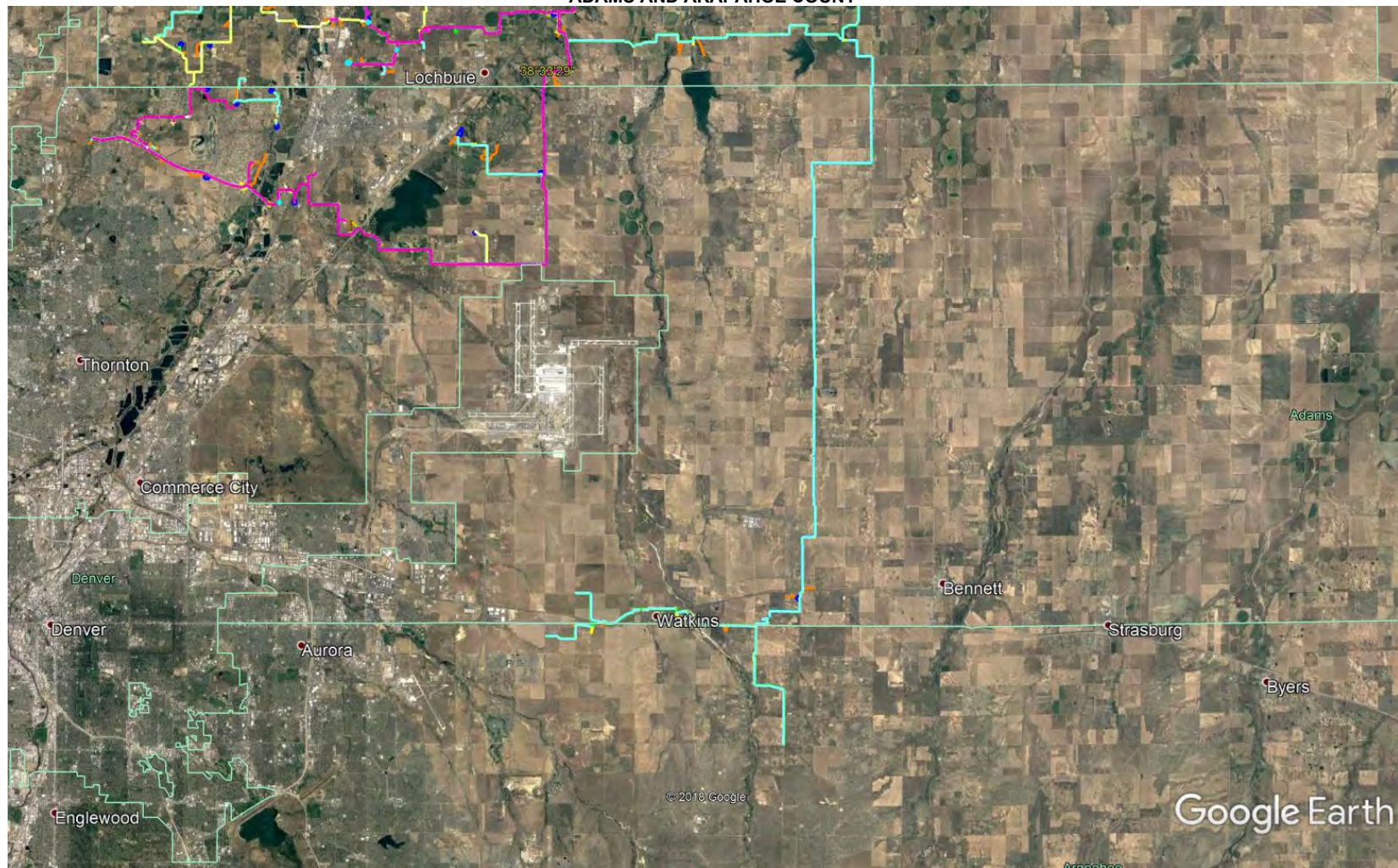
WELD COUNTY



ATTACHMENT A - MAPS AND DRAWINGS, CONTINUED

[Click to view/print Adams and Arapahoe County Overview Map](#)

ADAMS AND ARAPAHOE COUNTY



ATTACHMENT B - ADDITIONAL INFORMATION

No Files Uploaded

REVISION HISTORY

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
11/18/2021	ERP Scope and Description Scope and Description	
11/18/2021	ERP 1.0 Reporting and Notification 1.0 Reporting and Notification	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Fire Department	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Emergency Management	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Sheriff/Police Dept	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Ambulance/EMT	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal)	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Pipeline Safety Hotline	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Matt Norton, Mgr Operations, Williams/Rocky Mountain Midstream	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Craig Strother, Supv Operations	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Josh Bruce, Supv Operations	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Erin Schlunegger, Safety & Health Specialist IV	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.4 - Additional Contacts (External)	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.4 - Additional Contacts (External) Insert O'Brien's Oil Pollution Services (OOPS)	
11/18/2021	ERP 2.0 Available Resources 2.0 Available Resources	
11/18/2021	ERP Attachment A- Maps and Drawings Attachment A- Maps and Drawings	
11/18/2021	ERP 1.0 Reporting and Notification Table 1.3 - Oil Spill Removal Organizations (OSROs) Insert Forefront Emergency Management, LP	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Craig Strother	
5/18/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Josh Bruce	
5/23/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
6/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Erin Schlunegger, Process Safety Management Coordinator Sr	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kody Denny, Operations Technician Lead	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kenneth Meritt, Safety Specialist IV, Williams	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Jonathan Torizzo, Environmental Specialist IV	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Christopher Darling, Coordinator Maintenance	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Weston Sellers, Engineer Sr	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Devin Tibljas, Mgr Operations	
6/3/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Greg Anoaia, SupvEH&S	
11/9/2022	ERP 3.0 Response Actions 3.9 Natural Disasters	
12/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Sydney Rippey, Williams	
12/2/2022	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sydney Rippey, Williams	
12/5/2022	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies	
12/5/2022	ERP 1.0 Reporting and Notification Table 1.1 - Emergency Response Agencies Insert Weld County Communications Center	
6/1/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Josh Bruce	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Josh Bruce, Supv Operations	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Mick Blackwell, Operations Technician Sr	
7/7/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Josh Bruce, Supv Operations	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Scott Alexander, Operations Technician Sr	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Scott Alexander	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Scott Alexander, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Scott Alexander, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Christopher Darling, Operations Technician Sr	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Thomas Vanbibber, Williams	
12/18/2023	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Thomas Vanbibber, Williams	
2/21/2024	ERP 2.0 Available Resources 2.0 Available Resources	
3/14/2024	ERP 3.0 Response Actions 3.4 Responding to an Incident at a Remote Site	
3/14/2024	ERP 3.0 Response Actions 3.2 Establish Incident Command (ICS)	
3/14/2024	ERP 3.0 Response Actions 3.1 Evacuation	
3/18/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Sam Tippey, Supv Operations	
4/30/2024	ERP 3.0 Response Actions 3.1 Evacuation	
5/21/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sam Tippey	
5/28/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Sam Tippey	
5/28/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Matt Norton, Williams/Rocky Mountain Midstream	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Matt Norton, Mgr Operations, Williams/Rocky Mountain Midstream	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Remove Weston Sellers, E&C Project Manager Sr	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Cailin Harrington, Engineer II	
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Kevin Crawford, Operations Technician Sr	

REVISION HISTORY, CONTINUED

DATE OF CHANGE	CHANGE LOCATION	DESCRIPTION OF CHANGE
10/4/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Insert Alexander Ban, Operations Technician Sr	
11/7/2024	ERP 1.0 Reporting and Notification Table 1.2 - Required Contacts (Internal) Update Devin Tibljas	

Exhibit L
Stormwater Management Plan /
Erosion Sediment Control Plan

Stormwater Management Plan (SWMP)

for construction activities at:

Remora Connection
Manilla Rd & I-70
Bennett, CO 80102

SWMP Preparation Date: 10/24/2025

SWMP Revision Date: Insert Date

Docs. #3697430-v2

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Basic Acronyms:

SWMP: Stormwater Management Plan = **ESCP:** Erosion and Sediment Control Plan = **SWPPP:** Stormwater Pollution Prevention Plan

EC Plan: Erosion Control Plan (Site Map)

CM: Control Measures = **BMP:** Best Management Practices

MS4: Municipal Separate Storm Sewer System

Objectives:

The SWMP identifies potential pollutant sources that may contribute to stormwater pollution, and identifies CMs to reduce or eliminate water quality impacts during construction activities. The goal is to keep sediments on-site. The most efficient construction site control measures are those that prevent erosion from occurring.

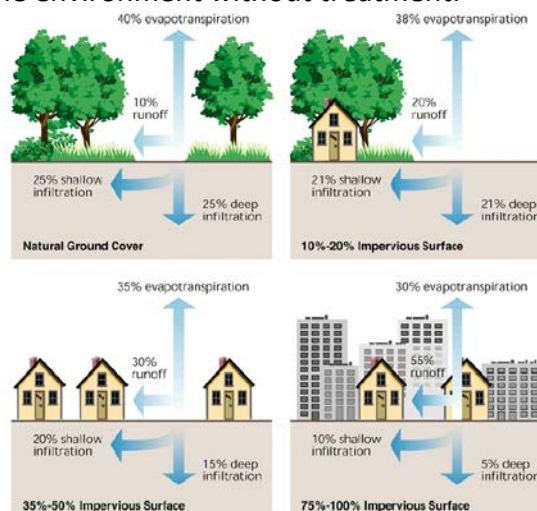
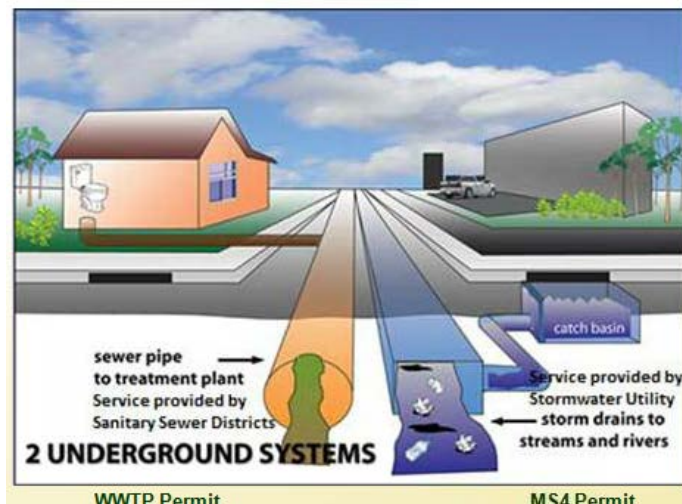
The SWMP must be completed and implemented prior to project breaking ground, and revised by the contractor's Qualified Stormwater Manager as construction proceeds, to accurately reflect the site conditions and practices until final stabilization is reached. The SWMP intends to meet the minimum requirements to comply with the State of Colorado CDPS General Permit for Stormwater Discharges Associated with Construction Activity, and local unincorporated Adams County regulations.

General Instructions:

To fill out the Stormwater Management Plan (SWMP) Template, select (double right click) the [blue text](#) and enter applicable information. If there is a blue box ☐, check when applicable. **Doo not leave blank sections.** If a section is "Not Applicable", select the [blue text](#) and enter "N/A".

Disclaimer: This document has been modified from EPA SWPPP Template (September 17, 2007) by Adams County in an effort to cover permit requirements. It is ultimately the Permittee's responsibility to complete, insert, update, modify, delete or add site specific information to ensure compliance with federal, state and local regulations. The information contained in this template is for general information purposes only. The information is provided by the County and while the County endeavors to keep the information up to date and correct, the County makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or any other aspect of this template or the information contained in the template for any purpose. The user is responsible for compliance with all applicable laws and regulations. Any reliance placed on such information is therefore strictly at your own risk. In making this template available, no client, advisory, fiduciary or professional relationship is implicated or established and neither the County nor any other person is, in connection with this template, engaged in rendering legal, advisory, consulting or other professional services or advice. The County reserves the right at any time and without notice to change, amend, or cease publication of this template.

Stormwater is runoff water from rain or snowmelt that does not infiltrate into the ground, and instead flows across the land discharging directly into the environment without treatment.



Runoff from construction sites can contain pollutants when runoff moves over and across disturbed areas discharging them into lakes, rivers, wetlands, and into MS4 systems.

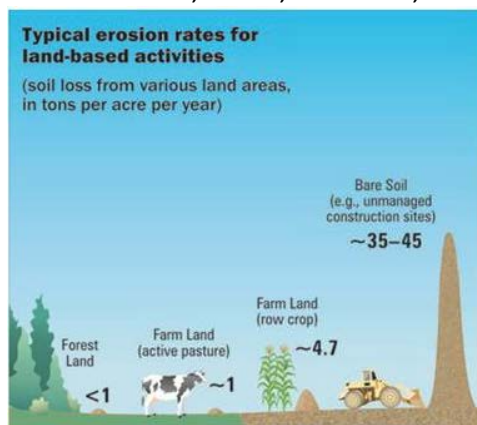


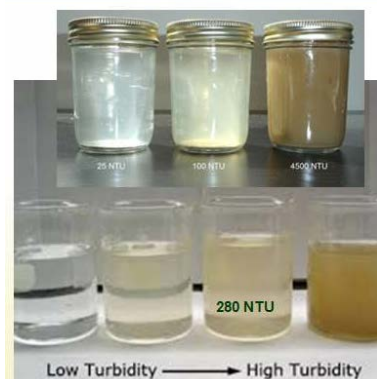
Figure 2. Typical erosion rates from land-based activities.



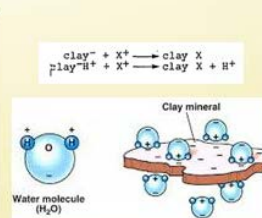
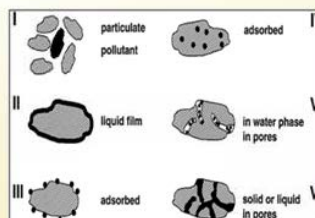
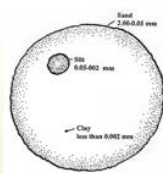
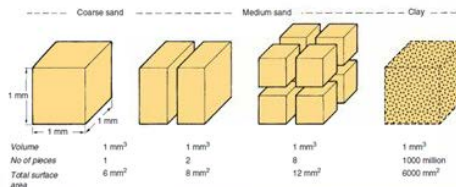
Unmanaged construction soils erodes about **6 times more** than farming activities

Typically, **sediment** from disturbed areas is the main pollutant source at construction sites.

Sediments: Turbidity



- **Negative Charge**
- **Large surface area**
- **Host Carrier**



Sediments easily attach to other pollutants and acts as a carrier, as well as impacting clarity of water which is critical for aquatic life and fish species spawning areas preservation.

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Instructions:

- Include basic site information identifying general project information, permit numbers.
- Include a project vicinity map in **Appendix 1**.
- Attach the State of Colorado CDPS Stormwater Construction Permit Certification Page in **Appendix 2**.
- Attach a copy of the City/County Stormwater Permit in **Appendix 2**.

Project/Site Name: [Remora Connection](#)

Project Location: [Manilla Rd & I-70](#)

City: [Bennett](#)

State: [CO](#) ZIP Code: [80102](#)

Subdivision: [N/A](#)

State of Colorado - CDPS Stormwater Discharge Permit associated with Construction Activities

Permit Number: COR-04 [01222](#)

Adams County Stormwater Quality (SWQ) Permit: [Pending](#)

1.2 Contact Information/Responsible Parties

Instructions:

List the owner, operator, stormwater contact, and organization that prepared the SWMP. Complete by selecting the [blue text](#), double right click, then type in the applicable information.

Owner:

[Williams Front Range, LLC.](#)

[Nathan Fronk](#)

[13781 Pacific Circle, Mead, CO](#)

Office #: [\(303\)-500-5053](#) Cell #: [\(307\)-371-3318](#)

Email: nathan.fronk@williams.com

Site Superintendent:

[Williams Front Range, LLC.](#)

[Kenny Berger](#)

[13781 Pacific Circle, Mead, CO](#)

Office #: [\(303\)-500-5053](#) Cell #: [\(303\)-319-8211](#)

Email: Kenneth.berger@williams.com

Qualified Stormwater Manager: Individual responsible for implementing, maintaining, and revising the SWMP, knowledgeable in the principles and practices of ESC and pollution prevention, with the skills to:

- Assess conditions at construction sites that could impact stormwater quality, and
- Assess the effectiveness of stormwater controls measures (CMs).

[Beacon Environmental](#)

[Chris Heilbrun](#)

[President](#)

[7343 S Alton Way, Ste 100, Centennial, CO 80112](#)

Office #: [\(720\)-500-2487](#) Cell #: [\(303\)-549-1740](#)

Email: chris@beacon-enviro.com

Qualified Stormwater Manager's area of control (if more than 1 operator at site):

[N/A](#)

SWMP prepared by:

[Beacon Environmental](#)

[Kevin Foust](#)

[7343 S Alton Way, Ste 100, Centennial, CO 80112](#)

Office #: [\(720\)-500-2487](#) Cell #: [\(814\)-242-5062](#)

Email: kevin@beacon-enviro.com

1.3 Nature and Sequence of Construction Activity

Instructions:

- Describe the scope of the construction activity at the project site.
- Identify the purpose of the construction activity, include estimated dates to begin and conclude.
- Describe the sequence for major construction activities at each phase of the construction project.

Project scope of work:

Scope involves the installation of up to a 10" gas pipeline with a total length of 0.58 miles. Activities include clearing & grubbing, excavations, pipeline installation, pressure tests, hot work, and other related midstream activities.

Type of construction activity:

☐ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility
☒ Other (please specify): Oil & Gas - Linear

Estimated Project Start Date: April 2026

Estimated Project Completion Date: July 2026

Estimated Project Final Stabilization: July 2026

Major phases of construction:

☒ Initial Control Measures (CM)
☐ Demolition
☐ Grading
☐ Utility Installation
☒ Interim CM
☐ Road Construction
☐ Vertical Construction
☒ Final Grade
☒ Final Stabilization CM
☒ Other (please specify such as Over-Excavation, etc.): Pipeline Installation

Earth Work Summary:

Cut: 0 CY

Fill: 0 CY

If excess dirt: N/A

If importing dirt: N/A

Is the off-site borrow/fill area within ¼ mile of the project? N/A

If yes: either incorporate off-site area to the project's SWMP/EC plan, or submit a separate SWMP/EC Plan for the off-site area.

1.4 Soils, Drainage Patterns, and Vegetation

Instructions:

- Describe the existing soil conditions at the construction site including soil type(s), drainage patterns, and other topographic features that might affect erosion and sediment control.
- Describe the pre-disturbance vegetation and include color pre-disturbance photos in **Appendix 3**.

Soil type:

Ascalon sandy loam, Ascalon-Vona sandy loams, Truckton loamy sand, Vona loamy sand

Source of this data:

NRCS

Soil's erosion potential:

Very low to low

Top Soil:

Describe quality of site's existing topsoil?

Topsoil is agricultural grade along ROW

Depth of top soil that will be preserved?

All topsoil will be preserved

Where will the top-soil be stored during construction?

Along upgradient side of ROW

Where will the top soil be ultimately re-utilized?

Topsoil will be reincorporated where removed on ROW

Drainage pattern - Describe existing drainage patterns, slopes and changes due to the proposed grading:

Flow direction varies along ROW, with direction of flow mostly directed to the north and east.
ROW will be restored to original grade.

Vegetation:

Describe type of pre-disturbance vegetation:

Pre-disturbance vegetation consists mostly of dryland grasses with low to moderate weed content.

Estimate the percentage of pre-existing vegetation cover of the entire site (%):

75% - 85%

Describe method for determining the percentage:

Vegetation transect

1.5 Construction Site Estimates

Instructions:

- Estimate total project area.
- Estimate the area to be disturbed by excavation, grading, or other construction activities, including off-site improvements, pavement cuts, dedicated off-site borrow or fill areas within ¼ mile from the site, equipment and material storage areas, and staging areas.

Total site area: 5.05 acres

Construction area to be disturbed: 4.8 acres

Are there any control measures (CMs) located **outside** the permitted area (or limits of construction), that are utilized for compliance, but not under the direct control of the Permittee?: No

If Yes: attach “Use Agreement” signed by the off-site owner/operator under **Appendix 11** and describe CMs location, specifications, etc.

1.6 Receiving Waters

Instructions:

- List the jurisdictional storm sewer system or drainage system that stormwater from your site discharges to, such as storm system within unincorporated Adams County MS4, CDOT MS4, City of Thornton MS4, etc.
- Indicate inside which watershed the project is located.
- List the waterbody(s) that would receive stormwater from your site, including streams, rivers, lakes and wetlands. Describe each as clearly as possible, such as: *Clear Creek, a tributary to the South Platte River*. Including water courses even if they are usually dry, such as borrow ditches, arroyos, and other unnamed waterways.
- Indicate if the stream segment of the waterbody(s) is impaired and if a Total Maximum Daily Load (TMDL) has been adopted for any pollutant.

Location of the site's storm **discharge**: [varies along ROW, mostly north and east perimeters](#)

If the site discharges to a public **Municipal Separate Storm Sewer System (MS4)**, insert the name of the MS4 owner: [Adams County MS4](#)

Name and description of the project's **watershed**: [South Platte River watershed](#)

Name and description of ultimately **receiving water(s)**, including stream segment designation: [South Platte River](#)

- Distance from the project to the closest receiving water: [0.6 miles \(West Sand Creek\)](#)
- Is the receiving water stream segment impaired? ☐ Yes / ☒ No
- If yes, list TMDL's adopted for each pollutant: [N/A](#)
- Are these pollutants expected to be present at the construction site? ☐ Yes / ☒ No
- Which pollutant?: [N/A](#)
- Describe specific control measures (CMs) selected for the pollutant-specific Wasteload Allocation (WLA): [N/A](#)

Are **stream crossings** within the construction site boundary? ☐ Yes / ☒ No

- Location within the site: [N/A](#)
- Stream name: [N/A](#)
- Description of any disturbed upland areas that may contribute to the stream at the stream crossing locations: [N/A](#)
- Description of the CMs to be implemented for those contributing disturbed upland areas: [N/A](#)

Other: [N/A](#)

1.7 Protected Site Features and Sensitive Areas

Instructions:

- Describe unique site features or sensitive area including historic structures, floodplain/floodway of streams, stream buffers, wetlands, specimen trees, natural vegetation, steep slopes, or highly erodible soils that are to be preserved. Describe the measures that will be used to protect these features. Include unique features and sensitive areas on the EC Plan drawings.
- Describe any known soil or groundwater contamination. Note that additional permitting is required from the State of Colorado, Water Quality Control Division.

Refer to <http://www.cdphe.state.co.us/hm/HMSiteCover.htm> and access the Hazardous Materials and Waste Management Division Site Locator Mapping Application.

Describe unique site feature or sensitive area to be preserved during construction:

West Sand Creek

Describe measures to preserve unique site feature or sensitive area during construction:

Bore under creek and maintain >50 foot vegetative buffer on each side of creek

Describe any known soil or groundwater contamination:

none

Describe management plan for contaminated soils and/or groundwater:

N/A

Attach applicable Permits (check if applicable):

- ☐ 404 Permit
- ☐ 401 Permit
- ☐ Dewatering Permit (off-site)
- ☐ Remediation Permit
- ☐ Other

1.8 Potential Sources of Pollution

Instructions:

- List and describe measures to control potential sources of pollution, which may reasonably be expected to affect stormwater quality discharges from the construction site.
- Below is a comprehensive list. Add rows if additional potential sources of pollution are identified.
- If a potential pollutant source is applicable to the site, then select the blue **Yes/No**, then type "Yes" or "No".

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation (as needed)
Disturbed & Stored Soils - grading - spoils - stockpiles	Yes	ESC CMs (IP, SF, SSA, TRM, RECP, TOP, SCL, SBB, RS, SB, ST) Preservation of existing vegetation (PV, VB, CF, CP) Materials management Solid waste management (SP, GH) Stockpile management (SP) Vehicle tracking control (VTC)	1. Delineate protected areas prior to construction. 2. Install CMs prior construction. 3. Manage materials effectively once they arrive on site. 4. Place trash receptacles prior to construction. 5. Implement spill response. 6. Implement stockpile mgnt controls. 7. Delineate vehicle travel areas prior to construction, adjust as needed.
Vehicle Tracking - all permitted vehicle traffic	Yes	ESC CMs (IP, SF, SSA, TRM, RECP, TOP, SCL, SBB, RS, SB, ST) Vehicle traffic controls Vehicle tracking controls (VTC) Street sweeping (SS)	1. Install CMs prior construction. 2. Delineate vehicle travel areas prior to construction, adjust as needed. 3. Install VTC prior to construction. 4. Implement SS as needed, in conjunction with start of construction.
Contaminated Soils	Yes	Hazardous materials management (GH, CT) Spill response & notification (GH) Stockpile management (SP)	1. Implement hazardous materials management. 2. Implement spill response procedures. 3. Implement stockpile mgnt controls.
Loading & Unloading - construction materials	Yes	Material management (GH) Vehicle traffic controls (VTC)	1. Manage materials effectively once they arrive on site. 2. Delineate vehicle travel areas prior to construction, adjust as needed.
Vehicle/equipment maint. & fueling - gas, oil, - diesel - lubricants - hydraulic fluids	Yes	Spill prevention controls (GH) Designated fuel storage area (GH) Spill response & notification (GH)	1. Designate fuel storage area. 2. Implement spill prevention controls. 3. Implement spill response and notification procedures.

* Refer to Section 2, for acronyms used to identify CM details.

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation
Outdoor storage - building materials - fertilizers - chemicals	Yes	Material storage procedures (GH)	1. Designate material storage areas prior to delivery. 2. Materials left outdoors must be covered if they can pollute stormwater. 3. Secondary containment must be used for hazardous materials.
Dust - wind transport - saw cutting	Yes	Dust control (DC) Temporary soil stabilization (SF, SD, GB, SSA, TRM, RECP, TOP) Street sweeping (SS) Preservation of existing vegetation (PV, VB, CF)	1. Delineate protected areas prior to construction. 2. Implement dust control in conjunction with soil disturbing activities. 3. Implement temporary soil stabilization measures as soon as practical. 4. Implement street sweeping at the start of major construction and maintain as needed.
Routine Maintenance Activities - fertilizers - pesticides - detergents - solvents - fuels, oils, etc.	Yes	Material storage (GH) Hazardous waste management (GH, Chemical Treatment) ESC CMs (IP, SF, SSA, RECP, TOP, SCL, SBB, RS, SB, ST)	1. Designate materials storage areas prior to site arrival. 2. Practice hazardous waste management procedures during the storage of such materials. 3. Install ESC measures prior to landscape work.
Non-industrial Waste - worker trash - portable toilets	Yes	Sanitary waste (GH) Solid waste management (GH)	1. Place temporary sanitary facilities on site and prevent off-site discharges. 2. Place trash receptacles on site.
On-site Industrial Waste - construction debris, etc	Yes	Waste management (GH) Liquid waste management (GH) Hazardous waste management (GH, CT)	1. Place trash receptacles on site. 2. Place designated watertight receptacles or washout area(s) prior to activities that produce liquid waste. 3. Implement hazardous waste management procedures.
Concrete Truck Chute/Tool Washing	No	Concrete washout area (CWA)	Install designated concrete washout(s) prior to concrete work.
Drywall Mud and Paint	No	Liquid waste management (GH)	Place designated watertight receptacles or washout area(s) prior to activities that produce liquid waste.
Fly Ash - concrete - flow fill	No	Concrete washout area (CWA) Hazardous waste management (GH)	1. Install designated CWA prior to concrete activities. 2. Implement hazardous waste management procedures.

* Refer to Section 2, for acronyms used to identify CM details.

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation
Dedicated: - Asphalt Plants - Concrete Batch Plants - Mortar/Masonry Mixing Stations	No	Secondary containment Concrete washout area (CWA) Solid waste management (GH) materials management (GH)	1. Install secondary containment CMs prior to using dedicated batch plants. 2. Establish dedicated washout area before construction begins. 3. Place trash receptacles on site. 4. Manage materials effectively once they arrive on site.
Waste from: - Geo-tech Test - Potholing - Saw Cutting - Utility borings for locates	Yes	Dust control (DC) Material storage (GH) Solid waste management (GH)	1. Implement dust control in conjunction with soil disturbing activities. 2. Designate materials storage areas prior to their arrival on site. 3. Place trash receptacles on site.
Demolition of infrastructure: - concrete curb - asphalt road - steel/rebar	No	Dust control (DC) Solid waste management (GH)	1. Implement dust control in conjunction with soil disturbing activities. 2. Place trash receptacles.
Electric Generator - pump	Yes	Secondary containment Spill response & notification (GH) Hazardous waste management (GH, CT)	1. Install secondary containment CMs prior to using generators. 2. Implement hazardous waste management procedures.
Areas where <u>potential spills</u> can occur	Yes	Hazardous waste management (GH) Spill response & notification (GH)	1. Implement hazardous waste management. 2. Implement spill response and notification procedures.
Flushing Waterlines	Yes	ESC CMs Low Risk Guidance for Potable Water **See Appendix 12	1. Install ESC measures prior to discharge. 2. Follow CMs required by the Low Risk Guidance**See Appendix 12
Pollutant Source	Yes/No	Indicate Control Measures	Describe Implementation
Pollutant Source	Yes/No	Indicate Control Measures	Describe Implementation
Pollutant Source	Yes/No	Indicate Control Measures	Describe Implementation

* Refer to Section 2, for acronyms used to identify CM details.

Potential hazardous material & chemical pollutants to stormwater:

Potentially on Site?	Material/ Chemical	Physical Description	Stormwater Pollutants	Location
No	Fertilizer	Liquid or solid grains	Nitrogen, phosphorous	Newly seeded areas
No	Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	Staging areas
No	Asphalt	Black solid	Oil, petroleum distillates	Streets
No	Concrete and Grout	White solid/grey liquid	Limestone, sand, pH, chromium	Curb and gutter, sidewalk, building construction
No	Curing compounds	Creamy white liquid	Naphtha	Curb and gutter, sidewalk, driveways, concrete slabs
Yes	Hydraulic oil/ fluids	Brown, oily petroleum hydrocarbon	Mineral oil	Leaks or broken hoses from equipment
Yes	Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment/staging area
Yes	Antifreeze/ coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment or vehicles
Yes	Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging areas
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here

1.9 Anticipated Allowable Sources of Non-stormwater Discharge

Instructions:

- Check box for presence of any anticipated allowable sources of non-stormwater discharge at the site such as: uncontaminated springs, landscape irrigation return flows, construction dewatering, concrete washout, super-chlorinated water for pipeline testing, etc.
- Include location (if applicable).

Description and location of any anticipated allowable sources of non-stormwater discharge at the site. Check if applicable:

☐ Natural springs, only if:

- Uncontaminated, and
- Spring flows are not exposed to land disturbance

Location: [INSERT LOCATION HERE](#)

☐ Landscape irrigation return flow

Location: [INSERT LOCATION HERE](#)

☐ Construction dewatering, only if:

- Groundwater or groundwater combined with stormwater is uncontaminated, and
- Dewatering CMs are identified in the SWMP (filtration measures at pump intake and outlet), and
- The discharge does not leave the site as surface runoff or to surface waters.

Note: For **off-site** discharges a separate State of Colorado Dewatering Permit is required.

Location: [INSERT LOCATION HERE](#)

☐ Concrete washout (CWA), only if:

- Liquids from washing concrete tools and concrete mixer chutes are properly contained, and
- No concrete washout water leaves the site as surface runoff or reach receiving waters

Liner under CWA is required if:

- The groundwater table level is high.
- CWA is within 400 feet of any natural drainage pathway or waterbody, or
- CWA is within 1,000 feet of any wells or drinking water sources.

☐ Check if the CWA liner is needed for this site.

Location: [INSERT LOCATION HERE](#)

☐ Super-chlorinated water for line testing (**Refer to **Appendix 12** for State Low Risk Guidance).

- Discharge only after dechlorination CMs, such as industry standard dechlorination techniques or chemical treatment to “no measurable chlorine” content, and
- Control flow during discharge to allow infiltration and reduce erosion of land

Location: [INSERT LOCATION HERE](#)

Description and location of any other anticipated allowable sources of non-stormwater discharge at the site: [INSERT TEXT HERE](#)

1.10 Demolition

Instructions:

- Before demolition of a structure begins, a copy of the Asbestos Certification from the State of Colorado certifying the structure is free of asbestos and other pollutants must be obtained. Attach a copy of the Demolition Permit, including the State of Colorado Asbestos Abatement Permit in Appendix 4.

Are there any building structures to be demolished at this site?

☐ Yes ☒ No

If yes:

- 1) Place a copy of Demolition Permit in Appendix 4.
- 2) Place a copy of the State of Colorado Asbestos Certification in Appendix 4.
- 3) Initial CMs must be installed prior beginning demolition work.
- 4) Describe additional steps taken to address demolition: [INSERT TEXT HERE](#)

SECTION 2: EROSION & SEDIMENT CONTROL MEASURES

Instructions:

Multiple permanent (structural) and temporary (non-structural) Control Measures (CM) are used for each phase of construction to minimize stormwater pollution. Select and categorize each CM according to their purpose:

1. Minimize disturbed area, and protect natural features and soil
2. Control stormwater flowing onto and through the project
3. Soil stabilization and slope protection
4. Storm drain inlet protection
5. Perimeter control and sediment barriers
6. Retention of sediment on-site
7. Construction entrance/exit stabilization
8. Additional CMs

Describe the CMs that will be implemented to control pollutants in stormwater discharges. A list of standard and commonly use CM is provided. The information also includes the *expected level of information* for each CM. The *expected level of information* must address the following:

- o *What CMs will be installed? Select and describe CMs.*
- o *When will the CMs be implemented and removed? Timing, temporary or permanent. All CMs shall be installed as a phased operation as construction progresses.*
- o *Where will the CMs be implemented? Location.*
- o *How will the CMs be maintained? Describe the maintenance and inspection procedures. Include protocols, thresholds, and schedules for cleaning, repairing or replacing damaged or failing CMs.*

If a construction project uses a CM that is not included below, add the CMs and ensure that the *expected level of information* is included.

Place CM detail drawings in **Appendix 5**. Use Urban Drainage Flood Control District's Detail Drawings:

<https://udfcd.org/wp-content/uploads/uploads/vol3%20criteria%20manual/Chapter%207%20Construction%20BMPs.pdf>

Indicate on the sections below which permanent (structural) or temporary (non-structural) control measure will be implemented to prevent stormwater pollution according to the following priorities:

1. Minimize Disturbed Area and Protect Natural Features and Soil

- | | | |
|-------------------------------------|-------|------|
| ▪ Limits of Construction | (LOC) | |
| ▪ Construction Phasing | (CP) | |
| ▪ Protection of Existing Vegetation | (PV) | SM-2 |

2. Control Stormwater Flowing onto and through the Project

- | | | |
|-------------------------------|---------|-------|
| ▪ Temporary Slope Drains | (TSD) | EC-7 |
| ▪ Earth Dikes/Drainage Swales | (ED/DS) | EC-10 |
| ▪ Sediment Trap | (ST) | SC-8 |
| ▪ Temporary Diversion Channel | (TDC) | SM-8 |
| ▪ Dewatering Operations | (DW) | SM-9 |
| ▪ Temporary Stream Crossing | (TSC) | SM-10 |

3. Soil Stabilization and Slope Protection

- | | | |
|-----------------------------------|---------|------|
| ▪ Surface Roughening | (SR) | EC-1 |
| ▪ Temporary and Permanent Seeding | (TS/PS) | EC-2 |

▪ Soil Binders	(SB)	EC-3
▪ Mulching	(MU)	EC-4
▪ Rolled Erosion Control Product	(RECP)	EC-6
▪ Temporary Slope Drain	(TSD)	EC-7
▪ Temporary Outlet Protection	(TOP)	EC-8
▪ Earth Dikes/Drainage Swales	(ED/DS)	EC-10
▪ Terracing	(TER)	EC-11
▪ Check Dams	(CD)	EC-12
▪ Streambank Stabilization	(SS)	EC-13
▪ Wind Erosion/Dust Control	(DC)	EC-14

4. Storm Drain Inlet Protection

▪ Rock Sock	(RS)	SC-5
▪ Inlet Protection	(IP)	SC-6

5. Perimeter Controls and Sediment Barriers

▪ Construction Fence	(CF)	SM-3
▪ Vehicle Tracking Control	(VTC)	SM-4
▪ Vegetated Buffer	(VB)	SC-9

6. Retention of Sediment On-Site

▪ Silt Fence	(SF)	SC-1
▪ Sediment Control Log	(SCL)	SC-2
▪ Straw Bale Barrier	(SBB)	SC-3
▪ Sediment Basin	(SB)	SC-7
▪ Sediment Trap	(ST)	SC-8

7. Construction Entrance/Exit Stabilization

▪ Vehicle Tracking Control	(VTC)	SM-4
▪ Stabilized Construction Roadway	(SCR)	SM-5
▪ Stabilized Staging Area	(SSA)	SM-6
▪ Street Sweeping	(SS)	SM-7

8. Additional CMs

▪ Concrete Washout Areas	(CWA)	MM-1
▪ Stockpile Management	(SP)	MM-2
▪ Paving and Grinding Operations	(PGO)	SM-12
▪ Temporary Cement Mixing Station		MM-3

2.1 Minimize Disturbed Area & Protect Natural Features and Soil

Instructions:

- Select methods (signs, construction fence) to protect unique site feature or sensitive area that shall not be disturbed. Describe how each unique site feature or sensitive area identified earlier will be protected during construction activity. Include these areas and associated measures on the EC Plan (site map).
- Indicate applicable measure by selecting the blue **Yes/No** then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: **1, 2, or 3**, and check whether the CM is **Permanent** (structural) or **Temporary** (non-structural). Add any additional CMs as needed.

Limits of Construction (LOC)		Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	LOC is use to designate the area of land that will be disturbed by construction activities.		
When: Installation	The permitted LOC shall be designated prior to land disturbing activities. If land is disturbed <u>outside</u> of the limits, then the State and Local stormwater construction discharge permits and SWMP/EC Plan must be amended.		
Where: Location	The permitted LOC shall be identified on the EC Plan.		
How: Maintenance & Inspection	LOC are typically delineated by silt fence or construction fence. Inspect LOC continuously and maintain the permitted LOC in an effort to not disturb land outside of the boundaries.		
Construction Phasing (CP)		Used: Yes	Phase(s): 1-3
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	CP is scheduling and sequencing of land disturbing activities to limit erosion on dormant parts of the site.		
When: Installation	At planning		
Where: Location	The permitted CP shall be identified on the SWMP/EC Plan.		
How: Maintenance & Inspection	At least establish CMs for initial, interim and final phase.		

Protection of Existing Vegetation (PV) SM-2		Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	A construction fence shall be installed around native areas that require protection. It may also be necessary to install perimeter controls to prevent sediment loading to those sensitive areas.		
When: Installation	CMs installed for protection of existing vegetation shall be installed prior to land disturbing activities or as part of the phasing of the construction project.		
Where: Location	PV shall be installed at locations identified on the SWMP as a preservation area.		
How: Maintenance & Inspection	Install and maintain PV per detail SM-2 (Appendix 5). Clearly mark the area on the EC plan to be preserved. No stockpiles, equipment, trailers or parking shall be allowed within the area. Repair or replace damaged or displaced protective barriers around the vegetated area. Inspect and maintain all areas that are designated to be protected. If damage to the vegetation occurs in a protected area, reseed the area with the same or similar species. Construction equipment must not enter a wetland area, except as permitted by the U.S. Army Corps of Engineers (USACE). In advertent placement of fill in a wetland is a 404 permit violation and requires notification to the USACE.		

Insert Additional Control Measure (CM)		Used: Yes/No	Phase(s): 1, 2, 3, N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What – Description	INSERT TEXT HERE		
When – Installation	INSERT TEXT HERE		
Where – Location	INSERT TEXT HERE		
How – Maintenance and Inspection	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.2 Control Stormwater Flowing onto and through the Project

Instructions:

- Select practices to divert flows from exposed soils, retain or detain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Temporary Slope Drains (TSD) EC-7		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	TSD is a pipe or culvert use to convey water down a slope where there is high potential for erosion. A collection system at the top of the slope directs runoff to the conveyance. The pipe outlet must be equipped with outlet protection.		
When: Installation	Install TSD prior to up-gradient land disturbing activities and maintain in place until no longer needed, but remove prior to the end of construction.		
Where: Location	TSD shall be installed at the locations identified on the SWMP. They are for long, steep slopes where there is a high potential for flow concentration.		
How: Maintenance & Inspection	TSD shall be installed and maintained per detail EC-7 (Appendix 5). Inspect and maintain all TSD throughout construction. Inspect the entrance for sediment accumulation. Inspect the downstream outlet for signs of erosion and stabilize, as needed. Remove accumulated sediment at the entrance and outfall, and inspect pipe anchors to ensure they are secure.		
Earth Dikes/Drainage Swales (ED/DS) EC-10		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	ED/DS are temporary storm conveyance channels used to divert runoff around slopes or to convey runoff to additional sediment control CMs prior to discharge from the site.		
When: Installation	Install ED/DS immediately upon completion of channel grading and maintain in place until the end of construction.		
Where: Location	ED/DS shall be installed at the locations identified on the SWMP. Typically installed around steep slopes or as temporary conveyance feature leading to a sediment basin or trap.		
How: Maintenance & Inspection	ED/DS shall be installed per detail EC-10 (Appendix 5). Continuously inspect and maintain all ED/DS for stability, compaction and signs of erosion and repair. Inspect side slopes for erosion and damage to erosion control fabric. Stabilize slopes and repair fabric as necessary. Accumulated sediment shall be removed when the sediment has accumulated to ½ of the depth of the ED/DS.		

Sediment Trap (ST) SC-8		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	ST is an excavated or bermed area designed to capture drainage, allowing settling of sediment from a disturbed area upstream smaller than 1 acre.		
When: Installation	ST shall be installed prior to land disturbing activities. The ST shall not be removed until the upstream area is stabilized.		
Where: Location	ST shall be installed at the locations identified on the SWMP. It shall be installed across a low area or drainage swale.		
How: Maintenance & Inspection	ST shall be installed per detail SC-8 (Appendix 5). Inspect regularly and maintain the ST embankments for stability and seepage. Inspect the ST outlet for debris and damage. Repair damage to the outlet, and remove all obstructions. Accumulated sediment shall be removed when it reaches ½ the height of the outflow embankment.		
Temporary Diversion Channel (TDC) SM-8		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	TDC diverts water from a stream to allow for construction activities to take place underneath or in the stream.		
When: Installation	TDC shall be installed prior to the start of any construction activities within a stream. The TDC shall be removed when the work at the down gradient or natural channel is no longer required. The TDC shall be backfilled and stabilized.		
Where: Location	TDC shall be installed at the location identified on the SWMP. TDC can be used in the following locations: construction of detention ponds, dams, in-stream grade control structures, utility installations or any activity that requires work in a waterway.		
How: Maintenance & Inspection	TDC shall be installed per detail SM-8 (Appendix 5). Inspect frequently and maintain all TDC throughout construction. Inspect flow barriers at the start and end of each workday. Inspect TDC for signs of erosion. Repair or replace the lining if necessary.		
Dewatering Operations (DW) SM-9		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	DW involves pumping water from an inundated area to a CM, then downstream to a receiving waterway, sediment basin or well-vegetated area. When pumping water <u>outside</u> of the permitted boundary a separate State of Colorado Dewatering Permit is required.		

When: Installation	DW is needed when an area of the construction site is inundated with water as a result of a large storm event, groundwater or existing ponding conditions. Remove DW once the work is no longer required.
Where: Location	Install DW at the locations identified on the SWMP. DW may occur in any area of the site where accumulated water needs to be removed.
How: Maintenance & Inspection	DW shall be conducted per detail SM-9 (Appendix 5). All dewatering discharges must be treated to remove sediment (and other pollutants) before discharging from the construction site. Inspect DW regularly and maintain operations throughout construction.

Temporary Stream Crossing (TSC) SM-10	Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary	

What: Description	TSC is needed where an actively flowing watercourse must be crossed. Crossing methods: culvert crossing, stream ford and temporary bridge. A 404 permit is required for placement of fill in a waterway from the U.S. Army Corps of Engineers per Section 404 of the Clean Water Act.
When: Installation	Install a TSC only when it is necessary to cross a stream; and remove it when the crossing is no longer needed for construction.
Where: Location	TSC shall be installed at the locations identified on the SWMP.
How: Maintenance & Inspection	TSC shall be installed per detail SM-10 (Appendix 5). Inspect and maintain TSC throughout construction. Inspect for bank erosion and in-stream degradation.

Insert Additional Control Measure (CM)	Used: Yes/No	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary	
What –Description	INSERT TEXT HERE	
When – Installation	INSERT TEXT HERE	
Where – Location	INSERT TEXT HERE	
How –Maintenance and Inspection	INSERT TEXT HERE	

For additional CMs, repeat as needed here.

2.3 Soil Stabilization and Slope Protection

Instructions:

- Soil Stabilization: Select controls to stabilize exposed soils where construction activities have temporarily or permanently ceased and measures to control dust generation.
- Slope Protection: Select controls that will be implemented to protect slopes from eroding.
- Indicate applicable measure by selecting the blue **Yes/No** then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: **1, 2, or 3**, and check whether the CM is **Permanent** (structural) or **Temporary** (non-structural). Add any additional CMs as needed.

Surface Roughening (SR) EC-1

Used: **Yes**

Phase(s): **2, 3**



Permanent



Temporary

What: Description	SR is tracking, scarifying, imprinting or tilling a disturbed area to provide temporary stabilization. Variations in the soil are created to help minimize wind and water erosion.
When: Installation	SR shall be performed either after final grading or to temporarily stabilize an area during active construction.
Where: Location	SR shall be used in the locations identified on the SWMP. It can be used on mild and steep slopes.
How: Maintenance & Inspection	SR shall be installed per detail EC-1 (Appendix 5). SR shall always be perpendicular to the slope. Continuously inspect and maintain all surfaces that are roughened throughout construction. SR shall be inspected for erosion as it is only a temporary control. Vehicles and equipment shall not be driven over areas that have been surface roughening. Refresh SR as needed.

Temporary and Permanent Seeding (TS/PS) EC-2

Used: **Yes**

Phase(s): **3**



Permanent



Temporary

What: Description	Seed is applied to disturbed areas in an effort to establish vegetation. TS is used to stabilize disturbed areas that will be inactive for an extended period. PM is used to stabilize areas at final grade that will not be otherwise stabilized. Effective seeding includes preparation of a seedbed, selection of an appropriate seed mixture, proper planting techniques, and protection of the seeded area with mulch, geotextile, or other appropriate measures. Mulching helps to protect the bare soil and must be secured by crimping, tackifiers, netting or other measures. Site specific <u>soil amendment</u> and <u>seed mix</u> specifications must be included in the SWMP.
When: Installation	TS/PS shall be performed on temporary inactive surfaces and following the completion of final grading.
Where: Location	TS/PS shall be completed in the locations identified on the SWMP to stabilize areas at final grade that will not otherwise be stabilized.

How: Maintenance & Inspection	TS/PS and secured mulching shall be installed per seed mix specifications and detail EC-2 (Appendix 5). Continuously inspect and maintain TS/PS and secured mulch throughout construction. Prepare the seedbed, select an appropriate seed mixture, use proper planting techniques and protect the seeded area with secured mulch.
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Soil Binders (SB) EC-3	Used: No	Phase(s): N/A
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<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary
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What: Description	SB involves a broad range of treatments that can be applied to exposed soils for temporary stabilization to reduce wind and water erosion.
When: Installation	Use SB for short term temporary stabilization. Soil binders can break down fast due to natural weathering.
Where: Location	SB can be used on mild and steep slopes including stockpiles. They are often used in areas where work has temporarily stopped, but is expected to resume before revegetation can be established.
How: Maintenance & Inspection	SB shall be used per detail EC-3 (Appendix 5). Continuously inspect and maintain all areas where SB have been applied throughout construction. SB can fail after heavy rainfall events and may require re-application. In particular, SB will generally experience spot failures during heavy rainfall events.

Mulching (MU) EC-4	Used: Yes	Phase(s): 3
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<input checked="" type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
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What: Description	MU consists of evenly applying straw, hay, shredded wood mulch, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers or netting.
When: Installation	MU is used in conjunction with TS/PS to help protect the seed bed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed area where there are growing season constraints. After MU application, there shall not be bare ground surface exposed. Reapply mulch, as needed, to cover bare areas.
Where: Location	Temporary and/or permanent MU shall be completed in the locations identified on the SWMP.
How: Maintenance & Inspection	MU shall be installed per detail EC-4 (Appendix 5). After MU, the bare ground surface shall not be more than 10% exposed. Re-apply mulch, as needed, to cover bare areas.

Rolled Erosion Control Product (RECP) EC-6		Used: No	Phase(s):
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	RECP consist of a variety of temporary or permanently installed manufactured products designed to control erosion and enhance vegetation establishment and survivability, especially on slopes and in channels. Categories of RECP: mulch control netting, open weave textile, erosion control blanket, and turf reinforcement mat.		
When: Installation	RECP shall be installed upon completion of slope grading and when revegetation measures are completed. RECP are biodegradable typically and do not need to be removed after construction.		
Where: Location	RECP shall be installed at the locations identified on the SWMP. Install RECP according to manufacturer's specifications.		
How: Maintenance & Inspection	RECP shall be installed per EC-6 (Appendix 5). Continuously inspect and maintain all RECP throughout construction. Check for signs of erosion, including voids under the mat. Also check for damaged or loose stakes and secure loose sections of the blanket.		
Temporary Slope Drain (TSD) EC-7		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	Refer to Section 2.2		
When: Installation	Refer to Section 2.2		
Where: Location	Refer to Section 2.2		
How: Maintenance & Inspection	Refer to Section 2.2		
Temporary Outlet Protection (TOP) EC-8		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	TOP consist of riprap rock placed at the outlet to help reduce erosion immediately downstream of a pipe, culvert, slope drain rundown or other conveyance with concentrated flow. TOP is intended for less than 2 years.		
When: Installation	TOP shall be installed immediately upon the completion of grading and removed once the pipe is no longer draining upstream area or once the downstream area has been sufficiently stabilized.		
Where: Location	TOP shall be installed at the locations identified on the SWMP, where there is a potential for accelerated erosion due to concentrated flow.		

How: Maintenance & Inspection	TOP shall be installed and maintain per EC-8 detail (Appendix 5). The Inspect regularly and maintain TOP as the rocks may be displaced. Accumulated sediment shall be removed before the TOP becomes buried and ineffective.
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Earth Dikes/Drainage Swales (ED/DS) EC-10	Used: No	Phase(s): N/A
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<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
What: Description	Refer to Section 2.2
When: Installation	Refer to Section 2.2
Where: Location	Refer to Section 2.2
How: Maintenance & Inspection	Refer to Section 2.2

Terracing (TER) EC-11	Used: No	Phase(s): N/A
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<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
What: Description	TER consists of grading steep slopes into a series of relatively flat sections separated at intervals by steep slope segments. They shorten the uninterrupted flow lengths on steep slopes, reducing the development of rills and gullies.
When: Installation	TER shall be completed during grading activities; when slope is at final grade, and vegetation shall be established as soon as possible.
Where: Location	TER shall be installed at the locations identified on the SWMP. It is usually used to control erosion on slopes that are steeper than 4:1.
How: Maintenance & Inspection	TER shall be installed per detail EC-11 (Appendix 5). TER shall be used in combination with other stabilization measures that provide cover for exposed soils. Inspect regularly and maintain all TER throughout construction. Remove accumulated sediment and repair rill erosion as necessary.

Check Dams (CD) EC-12	Used: No	Phase(s): N/A
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<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
What: Description	CDs are temporary or permanent grade control structures use in drainage channels to reduce the velocity of runoff and concentrated flows. They can be constructed from rock, gravel bags, sand bags or proprietary devices.

When: Installation	CD shall be installed prior to earth disturbing activities or immediately upon completion of channel grading. Temporary CDs shall be removed and area shall be stabilized. Permanent CDs shall be cleaned and remain in place.
Where: Location	CD shall be installed at the locations identified on the SWMP. Typically they are placed in drainage channels, swales or on mild to moderate steep slopes.
How: Maintenance & Inspection	CDs shall be installed per detail EC-12 (Appendix 5). They shall be placed at regularly spaced intervals along the drainage swale or ditch. The height of the CD shall allow for pooling of the runoff. Inspect regularly and maintain CD as rocks can be displaced and gravel bags or sandbags can be torn. Accumulated sediment shall be removed before it reaches ½ the height of the CD.

Streambank Stabilization (SS) EC-13	Used: No	Phase(s): N/A
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<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
What: Description	SS is a combination of erosion and sediment control measures to protect streams, banks, and in-stream habitat from accelerated erosion. Some of the measures include PV, CD, TS/PS and RECP.
When: Installation	SS shall be installed prior to earth disturbing activities to protect existing vegetation, preserve exposed streambank, or mitigate erosion rates from disturbed area. SS measures that will not remain in place as a part of final stabilization, such as silt fence, shall be removed when all land disturbing activities have ceased and the area has been permanently stabilized.
Where: Location	SS shall be installed at the locations identified on the SWMP. They shall be installed along the banks of streams or waterways.
How: Maintenance & Inspection	SS shall be installed per detail EC-13 (Appendix 5). Inspect regularly and maintain SS throughout construction.

Wind Erosion/Dust Control (DC) EC-14	Used: Yes	Phase(s): 1, 2, 3
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<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary
What: Description	DC helps keep sediments (from soils and stockpiles) from entering the air as a result of land disturbing construction activities. A variety of practices that focus on grading disturbed areas may be used.
When: Installation	Implement DC during conditions which result in dust from either construction activities or from naturally occurring winds. Do not overwater.
Where: Location	Dust abatement shall be completed throughout the project area where any material exists that has the potential to become airborne.
How: Maintenance & Inspection	DC measures shall be performed per detail EC-14 (Appendix 5). Apply water or magnesium chloride, seed and mulch or use spray-on soil binders on disturbed

	areas. Water and magnesium chloride shall be applied such that concentrated flows do not form.
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Insert Additional Control Measure (CM)		Used: Yes/No	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What – Description	INSERT TEXT HERE		
When – Installation	INSERT TEXT HERE		
Where – Location	INSERT TEXT HERE		
How – Maintenance and Inspection	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.4 Storm Drain Inlet Protection

Instructions:

- Select controls, including design specifications and details, that will be implemented to protect storm drain inlets receiving stormwater from the project.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Rock Sock (RS) SC-5		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	RS is an elongated cylindrical filter constructed of gravel wrapped by wire mesh or woven geotextile (aka "curb socks" if placed at angles at curb line).		
When: Installation	Install RS prior to land disturbing activities; once upstream stabilization is complete. Accumulated sediment shall be removed and properly disposed of.		
Where: Location	RS shall be installed at the locations identified on the EC Plan. They are use for perimeter control of a disturbed area, or as part of IP.		
How: Maintenance & Inspection	Install RS per detail SC-5 (Appendix 5). Inspect regularly and maintain RS as they are susceptible to displacement and breakage due to vehicle traffic. Accumulated sediment shall be removed to maintain functionality.		
Inlet Protection (IP) SC-6		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	IP is a permeable barrier that is installed around an inlet drain to filter runoff and remove sediment before entering the storm system. IP can be constructed of: RS, SCL, SF, blocks and RS, or other materials.		
When: Installation	Install IP for existing catch basins prior to land disturbing activities upslope from the inlet. IP for proposed catch basins shall be installed immediately after the drain is constructed. IP and associated sediment must be removed and properly disposed of when the drainage area upstream is stabilized.		
Where: Location	Install IP at the locations identified on the EC Plan. IP is not a stand-alone measure. It shall be used in conjunction with other up gradient measures.		
How: Maintenance & Inspection	Install IP per detail SC-6 (Appendix 5). IP shall enable the drain to function without completely blocking the flow. Inspect regularly and maintain IP throughout construction as it is the final measure before runoff enters the storm drain. Accumulated sediment shall be removed when it has reached ½ of the height of the IP or loses functionality, whichever comes first. IP is not standalone measure and shall be part of redundant system.		
Insert Additional Control Measures (CM)		Used: Yes/No	Phase(s): 1, 2, 3

<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	
What – Description	INSERT TEXT HERE
When – Installation	INSERT TEXT HERE
Where – Location	INSERT TEXT HERE
How – Maintenance and Inspection	INSERT TEXT HERE

For additional CMs, repeat as needed here.

2.5 Perimeter Control & Sediment Barriers

Instructions:

- Select measures, including design specifications and details, to filter and trap sediment before it leaves the construction site.
- Indicate applicable measure by selecting the blue **Yes/No** then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: **1, 2, or 3**, and check whether the CM is **Permanent** (structural) or **Temporary** (non-structural). Add any additional CMs as needed.

Construction Fence (CF) SM-3		Used: Yes	Phase(s): 1,2
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	CF restricts site access to designated entrances and exits, delineates construction site boundaries, and keeps construction out of sensitive locations such as natural areas to be preserved as open space, wetlands and riparian areas.		
When: Installation	CF shall be installed prior to earth disturbing activities; and removed once construction is complete.		
Where: Location	Install CF along the site perimeter or any area within the site where access shall be restricted.		
How: Maintenance & Inspection	CF shall be installed, maintained and removed per detail SM-3 (Appendix 5). Inspect CF for damages and slumping. The CF shall be tight and any areas with slumping or fallen posts shall be reinstalled or replaced.		
Vehicle Tracking Control (VTC) SM-4		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	VTC is a stabilized site access point that helps remove sediment from vehicle tires and reduces tracking of sediment onto paved surfaces.		
When: Installation	Install VTC prior to any land disturbing activities; and removed when there is no longer the potential for vehicle tracking to occur.		
Where: Location	VTC shall be installed at the location identified on the SWMP. Locate VTC where frequent vehicle traffic will exit the construction site onto a paved roadway.		
How: Maintenance & Inspection	VTC shall be installed per detail SM-4 (Appendix 5). All VTC must have non-woven geotextile fabric between the soil and rock pad. <u>Recycled concrete aggregate is not allowed because concrete dust elevates pH in stormwater.</u> Inspect regularly and maintain VTCs throughout construction. If the area becomes clogged with sediment, remove and dispose of excess sediment or replace material with a fresh layer of rock. Any sediment that is tracked onto adjacent roadways shall be cleaned with brooms, shovels (no water washing), or mechanically cleaned with a street vacuum sweeper.		

Vegetated Buffer (VB) SC-9		Used: Yes	Phase(s): 1, 2, 3
<input checked="checked" type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	VB is the preservation of natural vegetation to protect waterways and wetlands. A VB may be required as a type of setback from a natural waterway. It shall be used in conjunction with other perimeter measures.		
When: Installation	VB shall be pre-existing of land disturbing activities.		
Where: Location	VB shall be installed at the locations identified on the SWMP. VB shall be use with additional measures to separating land disturbing activities.		
How: Maintenance & Inspection	VB shall be installed per detail SC-9 (Appendix 5). Inspect regularly and maintain VB throughout construction. Inspect for signs of erosion. VB shall not be used as standalone measure and shall be part of redundant system.		
Insert Additional Control Measure (CM)		Used: Yes/No	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What – Description	INSERT TEXT HERE		
When – Installation	INSERT TEXT HERE		
Where – Location	INSERT TEXT HERE		
How – Maintenance and Inspection	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.6 Retention of Sediment On-Site

Instructions:

- Select sediment control practices, including design specifications and details (volume, dimensions, outlet structure) that will be implemented at the construction site to retain sediments on-site.
- Indicate applicable measure by selecting the blue **Yes/No** then type **"Yes"** or **"No"**. Identify the phase of construction during which the CM will be implemented: **1, 2, or 3**, and check whether the CM is **Permanent** (structural) or **Temporary** (non-structural). Add any additional CMs as needed.

Silt Fence (SF) SC-1		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	SF is a woven geotextile fabric attached to wooden posts and trenched into the ground. It is use to intercept sheet flow runoff from disturbed areas.		
When: Installation	SF shall be installed prior to land disturbing activities. SF shall be removed when the upstream area is stabilized.		
Where: Location	SF shall be installed at the locations identified on the SWMP. SF is typically installed along the contour of slopes, which is down slope of a disturbed area to accept sheet flow, and placed along the perimeter of a construction site. SF is not designed to receive concentrated flow, or to be used a filter fabric.		
How: Maintenance & Inspection	SF shall be installed per detail SC-1 (Appendix 5). Inspect regularly and maintain SF throughout construction. Any section of SF that has a tear, hole, slumping, undercutting or has been bypassed shall be replaced. Accumulated sediment shall be removed before it reaches a depth of 6 inches.		
Sediment Control Log (SCL) SC-2		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	SCL, aka "Straw Wattle", is a linear roll made of natural materials (straw, coconut fiber or other fibrous material), trenched into the ground and held with wooden stakes, used to intercept sheet flows from disturbed areas.		
When: Installation	SCL shall be installed during land disturbing activities and it may also be installed after formation of a stockpile. Once the upstream area is stabilized, remove and properly dispose of the SCL. If disturbed areas exist after removal, the area shall be covered with top soil, seeded and mulched.		
Where: Location	SCL shall be installed at the locations identified on the ECSP. SCL are typically used for stockpile control, IP, and CD in small drainage ditches, on disturbed slopes to shorten flow lengths and/or as part of multi-layered perimeter control along receiving water such as a stream, pond or wetland. SCL work well in combination with other layers of erosion and sediment controls. Stockpiles stored on impervious surfaces shall not be placed in a flowline and SCL shall be		

	weighted. Stockpiles stored on pervious surfaces may be protected by pervious SCL, SF or adequate vegetative cover.
How: Maintenance & Inspection	SCL shall be installed per detail SC-2 (Appendix 5), along (parallel) the slope contour to avoid concentrating flows. Inspect regularly and maintain SCL throughout construction as they will eventually degrade. Accumulated sediment shall be removed before the depth is ½ the height of the SCL.

Straw Bale Barrier (SBB) SC-3

Used: **No**

Phase(s): **N/A**

☐ **Permanent**

☐ **Temporary**

What: Description	SBB is a linear barrier of straw bales used to intercept and capture sheet flow and to trap sediment before runoff exits a disturbed area. Typically used as CD, or as IP.
When: Installation	Install SBB prior to land disturbing activities. Remove and properly dispose of the SBB once the upstream area has been stabilized. Areas of disturbance beneath the SBB shall be seeded and mulched when bales are removed.
Where: Location	Straw bale barriers shall be installed at the locations identified on the ECSP.
How: Maintenance & Inspection	SBB shall be installed per detail SC-3 (Appendix 5). Inspect regularly and maintain SBB throughout construction as they may be bypassed or undercut by flows and will degrade and rot. Accumulated sediment shall be removed when the depth reaches ¼ the height of the bale.

Sediment Basin (SB) SC-7

Used: **No**

Phase(s): **N/A**

☐ **Permanent**

☐ **Temporary**

What: Description	SB is a temporary structure designed to capture sediment transported in runoff and slowly release flows to allow time for settling of the sediment prior to discharge from the site
When: Installation	Install SB prior to land disturbing activities. SBs are typically converted to permanent detention basins. For conversion, remove accumulated sediment and re-configure the basin and outlet to meet the requirements of the final design. For SB that are temporary, remove when is no longer needed by filling in the excavated area with soil and stabilizing accordingly.
Where: Location	SB shall be installed at the locations identified on the SWMP. Where feasible, the SB shall be installed in the same location where a permanent post-construction detention basin will be located.
How: Maintenance & Inspection	The SB shall be installed per detail SC-7 (Appendix 5). Inspect regularly and maintain SB to be effective. Accumulated sediment shall be dredged from the basin when it reaches no more than ⅓ of the design storage volume.

Sediment Trap (ST) SC-8		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent		<input type="checkbox"/> Temporary	
What: Description	ST is an excavated or bermed area designed to capture drainage, allowing settling of sediment from upstream disturbed area smaller than 1 acre.		
When: Installation	Install ST prior to land disturbing activities. The ST shall not be removed until the upstream area is sufficiently stabilized.		
Where: Location	Install ST in the locations identified on the SWMP. It shall be installed across a low area or drainage swale.		
How: Maintenance & Inspection	ST shall be installed per detail SC-8 (Appendix 5). Inspect regularly and maintain the ST throughout construction. Inspect the embankments for stability and seepage, and the outlet for sediment, debris and damage. Repair damage to the outlet, and remove all obstructions. Accumulated sediment shall be removed when it reaches ½ the height of the outflow embankment.		

Compacted Earth Berm (B)		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary		
What – Description	Compacted Earth Berms are dirt mounds used as a perimeter control to intercept sediment laden runoff from disturbances. It is composed of soil and is used as a substitute for silt fence, sediment control logs, or other perimeter controls.		
When – Installation	Install Compacted Earth Berm simultaneously to clearing/grubbing of ROW. Berm shall be removed once construction activities are completed and ROW is undergoing final stabilization practices.		
Where – Location	Compacted Earth Berms shall be installed at locations identified in the SWMP, including downgradient perimeter of ROW, bore locations, etc.		
How – Maintenance and Inspection	Inspect regularly and maintain the Compacted Earth Berms throughout construction. Berms will be maintained to a 12” – 24” height and compacted as a pyramid with a flattened top.		

For additional CMs, repeat as needed here.

2.7 Construction Entrance/Exit Stabilization

Instructions:

- Select CM to stabilize vehicle entrance(s) and exit(s) to minimize off-site vehicle tracking of sediments and discharges to stormwater.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Vehicle Tracking Control (VTC) SM-4		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	Refer to Section 2.5		
When: Installation	Refer to Section 2.5		
Where: Location	Refer to Section 2.5		
How: Maintenance & Inspection	Refer to Section 2.5		
Stabilized Construction Roadway (SCR) SM-5		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	SCR is a temporary method to control sediment runoff, vehicle tracking, and dust from roads during construction activities consisting of aggregate base course of 3-inch diameter granular material (<u>recycled concrete aggregate is not allowed because concrete dust elevates pH in stormwater</u>).		
When: Installation	SCR is installed on high traffic construction roads to minimize dust and erosion, and use in place of rough cut street controls on roadways with frequent construction and vehicle traffic. Gravel shall be removed once the road is ready to be paved. Prior to paving, the road should be inspected for grade changes and damage. Re-grade and repair as necessary.		
Where: Location	SCR shall be installed at the locations identified on the SWMP. Apply gravel to disturbed areas that are used as a route for vehicles.		
How: Maintenance & Inspection	SCR shall be installed per detail SM-5 (Appendix 5). Inspect regularly and maintain SCR throughout construction. A stable surface cover of rigid gravel shall be maintained as well as repairing any perimeter controls. Inspect drainage ditches along the roadway for erosion and stabilize as needed.		
Stabilized Staging Area (SSA) SM-6		Used: Yes	Phase(s): 1, 2

<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary	
What: Description	SSA is a clearly designated area where construction equipment and vehicles, stockpiles, waste bins and other construction-related materials are stored. If the construction site is big, more than one SSA may be necessary.
When: Installation	SSA shall be installed prior to any land disturbing activities.
Where: Location	SSA shall be installed at the location identified on the SWMP.
How: Maintenance & Inspection	SSA shall be installed per detail SM-6 (Appendix 5). Inspect regularly and maintain SSA throughout construction. A stable surface cover of rigid gravel shall be maintained as well as repairing any perimeter controls and following good housekeeping practices.

Street Sweeping (SS) SM-7		Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary			
What: Description	SS is used where vehicles track sediment onto paved roadways to reduce the transport of it into storm drain systems or surface waterways.		
When: Installation	Manual SS or mechanical vacuuming SS shall be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. SS shall be completed prior to any precipitation events, at the end of the workday as needed, and at the end of construction.		
Where: Location	SS shall be utilized throughout the site and also on adjacent areas to construction.		
How: Maintenance & Inspection	SS shall be performed per detail SM-7 (Appendix 5). Use standard SS equipment to adequately remove sediment from roadways adjacent to the construction site.		

Insert Additional Control Measure (CM)		Used: Yes/No	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What – Description	INSERT TEXT HERE		
When – Installation	INSERT TEXT HERE		
Where – Location	INSERT TEXT HERE		
How – Maintenance and Inspection	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.8 Additional Control Measures (CMs)

Instructions:

Indicate applicable CMs by selecting the blue [Yes/No](#) then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: [1, 2, or 3](#), and check whether the CM is [Permanent](#) (structural) or [Temporary](#) (non-structural). Add any additional CMs as needed.

Concrete Washout Areas (CWA) MM-1		Used: No	Phase(s): N/A
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	CWA is a specific area for concrete washing activities. It can be an excavation of a pit in the ground, above ground storage area or prefabricated haul-away container.		
When: Installation	CWA shall be installed prior to any concrete delivery to the construction site; and remove upon termination of use of the washout. Accumulated solid waste, including concrete waste and any contamination soils, must be removed from the site to a designated disposal location.		
Where: Location	CWA shall be installed at the locations identified on the SWMP. Lined CWA if the groundwater table is high; or if the CWA will be placed within 400 ft of a natural drainage pathway/waterbody; or within 1,000 ft of a wells or drinking water source.		
How: Maintenance & Inspection	CWA shall be installed per detail MM-1 (Appendix 5). Inspect regularly and maintain CWA throughout construction. Ensure adequate signage is in place identifying the location of the CWA. Remove concrete waste when filled to about $\frac{3}{4}$ of CWA capacity to maintain functionality.		
Stockpile Management (SP) MM-2		Used: Yes	Phase(s): 1, 2
<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary			
What: Description	SP includes measures to minimize erosion and sediment transport from stockpiles. SP shall be used when soils or other erodible materials are stored.		
When: Installation	SP locations shall be determined during construction. If temporary removal of a CM is necessary to access the SP, ensure CMs are re-installed per detail drawing. When SP is no longer needed, properly dispose of excess materials and re-vegetate or stabilize the ground surface where the SP was located.		
Where: Location	SP locations shall be placed away from areas where concentrated stormwater flow is anticipated, major drainageways, gutters, and storm sewer inlets. SP locations shall be noted on the SWMP.		
How: Maintenance & Inspection	SP shall be installed per detail MM-2 (Appendix 5). Inspect regularly and maintain SP throughout construction. It is recommended to place SP on a pervious surface and protected from sediment transport with measures such as SCL, VB and/or SF. SP are only allowed on impervious surfaces if no other		

	practical alternative exists. Provide weighted sediment control measures around the perimeter of the SP, such as RS or sand bags.
--	---

Paving and Grinding Operations (PGO) SM-12 Used: **No** Phase(s): **N/A**

<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	
What: Description	Runoff management practices shall be used during all PGO. A variety of management practices can be used such as: IP, perimeter controls, store materials away from the storm sewer system, drainages and waterways, and keep a spill kit onsite.
When: Installation	PGO shall be scheduled during dry weather. Recycle asphalt and pavement material when feasible. Material that cannot be recycled must be disposed of properly.
Where: Location	Use runoff management practices during all paving and grinding operations such as surfacing, resurfacing, and saw cuts.
How: Maintenance & Inspection	PGO shall be installed per detail SM-12 (Appendix 5). Inspect regularly and maintain PGO throughout construction.

Temporary Cement Mixing Area MM-3 Used: **No** Phase(s): **N/A**

<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	
What: Description	Contained area for concrete, cement, mortar, drywall, mud and stucco mixing activities.
When: Installation	Install prior to any material mixing activity; and remove upon termination of use of the area.
Where: Location	Installed at the locations identified on the SWMP.
How: Maintenance & Inspection	Install per detail (attach to Appendix 5). Inspect regularly and maintain capacity throughout construction. Clean-up if there are spills.

Insert Additional Control Measure (CM) Used: **Yes/No** Phase(s): **1, 2, 3**

<input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	
What – Description	INSERT TEXT HERE
When – Installation	INSERT TEXT HERE
Where – Location	INSERT TEXT HERE
How – Maintenance and Inspection	INSERT TEXT HERE

For additional CMs, repeat as needed here.

SECTION 3: CONSTRUCTION SITE PHASING & EC PLAN

3.1 Construction Site Phasing Summary

Instructions:

The SWMP and EC Plan (Site Map) shall clearly delineate the construction sequencing between the separate phases of construction, and the CM/BMP implementation of the permanent and temporary CMs.

Using the information under **Section 1.3 Nature and Sequence of Construction Activity**, describe the construction phase and the permanent or temporary CMs associated with each of the following 3 phases:

- Initial Construction = Phase I, Initial BMP/CMs
- Interim Construction = Phase II, Interim BMP/CMs
- Final Construction = Phase III, Final BMP/CMs

The EC Plan **must** identify location of the proposed CMs to be implemented during the 3 phases of construction.

Develop 3 separate phased detailed site maps (one plan sheet representing one phase; do not combine). Place the EC Plan sheets in **Appendix 6**. Place CMs details in **Appendix 5**.

■ Initial Construction - Phase I

- Select applicable construction activities

- ☐ Demolition
- ☒ Clearing, Grubbing, Tree and Shrub Removal
- ☒ Top Soil Stripping and Stock Piling
- ☐ Grading
- ☐ Over-excavation/Soil conditioning
- ☐ Utility Installation
- ☐ Dewatering
- ☐ Other: Insert Here

☒ Initial Control Measures (CM)

- ☒ Stabilized Staging Area (SSA) SM-6
- ☒ VTC to enter/exit into public roads
- ☒ Perimeter Control
- ☐ Inlet Protection (IP) SC-6 on existing site or off-site storm drains
- ☐ Check Dams (CD) EC-12
- ☒ Rock Sock (RS) SC-5
- ☐ Silt Fence (SF) SC-1
- ☒ Sediment Control Log (SCL) SC-2
- ☐ Sediment Basin (SB) SC-7
- ☐ Sediment Trap (ST) SC-8
- ☐ Earth Dikes/Drainage Swales (ED/DS) EC-10
- ☐ Dewatering Operations (DW) SM-9
- ☐ Stockpile Management (SP) MM-2
- ☐ Surface Roughening (SR) EC-1
- ☐ Temporary Seeding (TS) EC-2

- ☐ Soil Binders (SB) EC-3
- ☒ Limits of Construction (LOC)
- ☒ Protection of Existing Vegetation (PV) SM-2
- ☒ Employee Training
- ☒ Street Sweeping (SS) SM-7
- ☒ Dust Control (DC) EC-14
- ☒ Good Housekeeping Practices **(required)**
- ☒ Spill Prevention, Containment and Control **(required)**
- ☒ Covering Outdoor Storage and Handling Areas **(required)**
- ☐ Other: Insert Here

▪ **Interim Construction - Phase II**

- Select applicable construction activities

- ☐ Road Construction
- ☐ Parkinglot Construction
- ☐ Vertical Construction
- ☐ Dewatering
- ☐ Other: Insert Here

☒ Interim Control Measures (CM) - BMPs/CMs associated with this Phase

- ☐ Inlet Protection (IP) SC-6 as new storm drains are constructed
- ☐ Outlet Protection (OP)
- ☐ Check Dams (CD) EC-12
- ☒ Rock Sock (RS) SC-5
- ☐ Installation of additional CMs at curbside, sidewalks, medians, and parking islands once pavement is laid (until landscape begins)
- ☐ VTC to enter/exit dirt lots from internal roads or parkinglot
- ☐ Concrete Washout Areas (CWA) MM-1
- ☐ Temporary Cement Mixing Area
- ☐ Stabilized Staging Area (SSA) SM-6
- ☐ Silt Fence (SF) SC-1
- ☒ Sediment Control Log (SCL) SC-2
- ☐ Sediment Basin (SB) SC-7
- ☐ Sediment Trap (ST) SC-8
- ☐ Earth Dikes/Drainage Swales (ED/DS) EC-10
- ☐ Surface Roughening (SR) EC-1
- ☐ Temporary Seeding (TS) EC-2
- ☐ Soil Binders (SB) EC-3
- ☐ Dewatering Operations (DW) SM-9
- ☒ Stockpile Management (SP) MM-2

- ☒ Limits of Construction (LOC)
- ☒ Protection of Existing Vegetation (PV) SM-2
- ☒ Employee Training
- ☒ Street Sweeping (SS) SM-7
- ☒ Dust Control (DC) EC-14
- ☒ Good Housekeeping Practices **(required)**
- ☒ Spill Prevention, Containment and Control **(required)**
- ☒ Covering Outdoor Storage and Handling Areas **(required)**
- ☐ Other: Insert Here

▪ **Final Construction - Phase III**

- Select applicable construction activities

- ☒ Final Grade
- ☒ Top Soil Placement
- ☐ Landscape (per approved plan)
- ☒ Removal of applicable temporary BMPs/CMs
- ☐ Permanent pond conversion + removal of sediments on the SB
- ☐ Other: Insert Here

- ☒ Final Stabilization - BMPs/CMs associated with this Phase

- ☐ Sod
- ☒ Permanent Seeding & Mulching (PS/MU)
- ☐ Erosion Control blankets (RECP)
- ☒ Limits of Construction (LOC)
- ☒ Protection of Existing Vegetation (PV) SM-2
- ☒ Employee Training
- ☒ Street Sweeping (SS) SM-7
- ☒ Dust Control
- ☒ Good Housekeeping Practices **(required)**
- ☒ Spill Prevention, Containment and Control **(required)**
- ☒ Covering Outdoor Storage and Handling Areas **(required)**
- ☐ Other: Insert Here

3.2 *General Notes*

Instructions:

Refer to **Appendix 13** for the General EC Plan Notes from Unincorporated Adams County.

SECTION 4: WASTE MANAGEMENT PLAN

Instructions:

Complete the Waste Management Plan below by describing site-specific pollution prevention CMs that will be implemented to control pollutants in stormwater from construction sites. Indicate which of the following CM categories are applicable for your construction site:

- | | |
|---|---------------------------|
| ▪ Covering Outdoor Storage and Handling Areas | (required) |
| ▪ Spill Prevention and Response Plan | (required) |
| ▪ Good Housekeeping | (required) |
| ▪ Vehicle Maintenance, Fueling and Storage | (required, if applicable) |
| ▪ Street Sweeping and Cleaning | (required, if applicable) |
| ▪ Storm Sewer System Cleaning | (required, if applicable) |

4.1 Covering Outdoor Storage and Handling Areas

Instructions:

- Practices for outdoor storage and handling areas are required to be implemented in all 3 phases of construction (initial, interim and final).

Covering Outdoor Storage and Handling Areas

Used: Yes

Phase(s): 1, 2, 3

☐ **Permanent**

☒ **Temporary Procedure**

Description: When raw materials, byproducts, finished products, storage tanks, and other materials are stored or handled outdoors, stormwater runoff that comes in contact with the materials can become contaminated. Proactively covering storage and handling areas can be an effective source control for such areas. Coverings can be permanent or temporary and consist of tarp, plastic sheeting, roofing, enclosed structures, or other approaches that reduce exposure of materials to precipitation and wind.

Uses: Covering is appropriate for areas where solids (e.g., gravel, compost, building materials) or liquids (e.g., oil, gas, tar) are stored, prepared, or transferred. Cover the following areas that are applicable to this construction site:

- **Loading and Unloading:** Loading and unloading operations usually take place at outside storage or staging area on the construction site. Materials may be spilled during transfer between storage facilities and trucks during pumping of liquids, pneumatic transfer of dry chemicals, and mechanical transfer of bags, boxes, drums, or other containers by material handling equipment.
- **Aboveground Tanks/Liquid Storage:** Accidental releases of chemicals from above-ground liquid storage can contaminate stormwater with a variety of pollutants. Several common causes of accidental releases from above-ground storage include: external corrosion and structural failure, problems due to improper installation, spills and overfills due to operator error, failure of piping systems, and leaks or spills during pumping of liquids or gases between trucks to a storage facility.
- **Outside Manufacturing:** Common outside manufacturing activities may include parts assembly, rock grinding or crushing, metals painting or coating, grinding or sanding, degreasing, concrete manufacturing, parts cleaning or operations that use hazardous materials. These activities can result in dry deposition of dust, metal and wood shavings and liquid discharges of dripping or leaking fluids from equipment or process and other residuals being washed away in storm runoff. In addition, outside storage of materials and waste products may occur in conjunction with outside manufacturing.
- **Waste Management:** Wastes spilled, leached, or lost from outdoor waste management areas or outside manufacturing activities may accumulate in soils or on other surfaces and be carried away by storm runoff. There is also the potential for liquid wastes from surface impoundments to overflow to surface waters or soak the soil where they can be picked up by runoff. Possible stormwater contaminants include toxic compounds, oil and grease, oxygen-demanding organics, paints and solvents, heavy metals and high levels of

suspended solids. Lack of coverage of waste receptacles can result in precipitation seeping through the material and collecting contaminants or the material being blown around the site and into the storm sewer system. Containment sources include waste piles, wastewater and solid waste treatment and disposal, land application sites, dumpsters, or unlabeled drums.

- **Outside Storage of Materials:** Raw materials, intermediate products, byproducts, process residuals, finished products, containers, and materials storage areas can be sources of pollutants such as metals, oils and grease, sediment and other contaminants. Pollutant transport can occur when solid materials wash off or dissolve into water, or when spills or leaks occur.

Practice Procedures:

- Where practical, conduct operations indoors. If outdoors, then select a temporary or permanent covering to reduce exposure of materials to precipitation and runoff.
- The type of covering selected depends on a variety of factors such as the type and size of activity being conducted and materials involved. Types of cover range from relatively inexpensive tarps and plastic sheeting to overhead structures or fully enclosed buildings equipped with ventilation, lighting, etc.
- Covering practices should be combined with Good Housekeeping to be most effective.
- Tarps and plastic sheets require more frequent inspection and maintenance.

Place site-specific information here:

[INSERT TEXT HERE](#)

4.2 Spill Prevention and Response Plan

Instructions: Implement spill prevention, containment and control practices during all 3 phases of construction.

Spill Prevention & Response Plan	Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary Procedure	

Spills and leaks of solid and liquid materials processed, handled or stored outdoors can be a source of stormwater pollution. Spilled substances can reach receiving waters when runoff washes these materials from impervious surfaces or when spills directly enter the storm system during dry weather conditions. Effective controls depend on spill prevention and response measures, proper training, and may include structural spill containment or control devices. Spill containment measures include temporary or permanent curbs or berms that surround a potential spill site. Berms may be constructed of concrete, earthen material, metal, synthetic liners, or other material. Spill control devices include valves, slide gates, or other devices that can control and contain spilled material.

Spill Prevention Measures

- Train key employees in plan and provide clear, common-sense spill prevention practices and clean-up procedures to be strictly followed.
- Identify equipment that is exposed to precipitation, pollutants that may be generated and possible sources of leaks or discharges.
- Perform inspections and preventative maintenance of equipment for proper operation and to check for leaks or evidence of discharge (stains). Ensure repairs are completed or provide temporary leak containment until such repairs can be made.
- Drain used motor oil and other automotive fluids in a designated area away from storm inlets. Collect spent fluids and recycle or dispose of properly. Never dispose into storm or sanitary sewer.
- In fueling areas, clean up spills with dry methods (absorbents) and use damp cloths on gas pumps and damp mops on paved surfaces.
- Never hose down a spill or absorbent materials into the storm drain, or down into an interior floor drain which leads to the sanitary sewer system.
- Reduce stormwater contact with equipment and materials by implementing covered storage, reduce stormwater run-on and follow good housekeeping practices.
- Post signs at critical locations with Spill Prevention and Response Plan information.

Identification of Spill Areas: Spill prevention and response measures shall be implemented at construction sites in areas where materials may be spilled in quantities that can adversely impact receiving waters or the storm system. Identify potential spill areas, potential spill volumes, material types, frequency of material used, and drainage paths from spill areas with relation to storm sewer inlets, adjacent water bodies, structural CMs, and containment structures. Use this information to determine the types of spill prevention and control measures needed specific to the site conditions. Show the potential spill areas on the EC Plan:

-
- Loading and unloading areas
 - Outdoor storage areas
 - Outdoor manufacturing or processing activities
 - Waste disposal
 - Areas that generate significant dust or particulates that may later deposit on the ground
 - Areas prone to spills based on past experience at the site
 - Locations where other routine maintenance activities occur
 - Areas where smaller leaks may occur (parking lots)

Material Handling Procedures: From a water quality perspective, the primary principle behind effective material handling practices is to minimize exposure to precipitation. Store the material indoors, otherwise implement the following outdoor materials handling procedures:

- Divert stormwater around materials storage areas.
- Keep bulk solid materials (raw materials, sand, gravel, topsoil, compost, concrete, packing materials, metal products, etc) covered and protected from stormwater.
- When practical, store materials on impermeable surfaces.
- Store hazardous materials according to federal, state, and local requirements.
- Adopt procedures to reduce spills or leaks during filling or transfer of materials.
- Substitute less toxic or nontoxic materials for toxic materials.
- Store containers that are easily punctured or damaged away from high traffic areas.
- Add waste-capture containers such as collection pans for lubricating fluids.
- Store drums and containers with liquids on impermeable surfaces and provide secondary containment. Place drums stored outdoors on pallets to minimize contact with runoff.

Spill Response Procedures: Tailor spill response procedures to site-specific conditions and industry-specific regulatory requirements. Follow procedures:

- Contain and cleanup spills promptly after the spill is discovered.
 - Sweep up small quantities of pollutants to reduce exposure to runoff.
 - Place absorbents at fueling areas or areas susceptible to spills.
 - Wipe up small spills with a rag, store rags in appropriate containers, dispose of rags properly or use a professional industrial cleaning service.
 - Contain medium-sized spills with absorbents and use berms or absorbent "snakes" as temporary booms for the spill. Store and dispose of absorbents properly. Wet/dry vacuums may be used, but not for volatile fluids.
 - Install drip pans below minor equipment leaks until a repair can be made.
 - For large spills, first contain the spill and plug storm inlet where the liquid may migrate off-site, then clean up the spill.
-

-
- Excavation of spill areas to removed contaminated material may be required where large liquid spills occur on unpaved surfaces.
 - Maintain an inventory of cleanup materials onsite and strategically locate them based on the types and quantities of chemicals present.
 - Records of spills, leaks, or overflows that result in the discharge of pollutants must be documented and maintained.

Two approaches are used when implementing spill containment measures: 1) Design system to contain the entire spill; or 2) Use curbing to route spilled material to a collection basin. Both containment berming and curbing should be sized to safely contain or convey to a collection basin a spill from the largest storage tank, tanker truck, or other containment device in the possible spill area. The spill containment area must have an impermeable surface (impermeable liner, asphalt or concrete) to prevent groundwater contamination. Design containment system to enable collection and removal of spilled material through a pump or vacuum trucks, sorbent or gelling material, etc. Material removed must be disposed of or recycled according to local, state, and federal standards. If the capacity of the spill containment is exceeded, supplemental measures should be available such as a portable containment device, sorbent materials, or gelling agents to solidify the material. Water that collects within containment areas due to rainfall or snowmelt must be appropriately treated before release from the spill area.

Emergency 24-Hour Site Contact (with spill response and clean-up authority):

Nate Fronk

Williams Front Range, LLC.

Office #: (xxx)-xxx-xxxx

Cell #: (307) 371-3318

Email: nathan.fronk@williams.com

Notification Procedures: Some spills may need to be reported to the State of Colorado, Water Quality Control Division and Adams County Stormwater Division immediately upon discovery. Releases of chemical, oil, petroleum product, sewage, etc., which may enter State Waters must be reported to: State of Colorado, 24-hour Emergency Spill Reporting Line: 1-877-518-5608. www.cdphe.state.co.us/emp/spillsandreleased.htm). Adams County Stormwater Hotline: 720-523-6400; Public Works: 303-453-8787. Tri-County Health Department: 303-220-9200.

[Beacon Environmental: 720-500-2487](tel:7205002487)

[Insert: List of spill clean-up materials on-site](#)

[Insert: Incorporate by reference any part of a Spill Prevention Control and Countermeasure \(SPCC\) plan under section 311 of the Clean Water Act \(CWA\)](#)

The relevant sections of any referenced plans must be available on-site

[Insert: Incorporate by reference any part of the Spill Prevention Plan required by a separate CDPS permit](#)

The relevant sections of any referenced plans must be available on-site

[INSERT ADDITIONAL INFORMATION HERE](#)

4.3 Good Housekeeping

Instructions: Implement good housekeeping practices during all 3 phases of construction (Initial, interim & final).

Good Housekeeping Practices	Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary	
<p>Description: Good housekeeping practices are designed to maintain a clean and orderly work environment. The most effective first steps towards preventing stormwater pollution at construction sites simply involve using common sense to improve the site's basic housekeeping methods. Poor housekeeping practices result in increased waste and potential for stormwater contamination. A clean and orderly work site reduces the possibility of accidental spills caused by mishandling of chemicals and equipment and should reduce safety hazards to personnel. A well-maintained material and chemical storage area will reduce the possibility of stormwater mixing with pollutants. Some simple procedures a site can use to promote good housekeeping include improved operation and maintenance of machinery and processes, material storage practices, material inventory controls, routine and regular clean-up schedules, maintaining well organized work areas, signage, and educational program for employees and the general public.</p> <p>Practice Procedures for Operation and Maintenance:</p> <ul style="list-style-type: none">▪ Maintain dry and clean floors and ground surfaces by using brooms, shovels, vacuums or cleaning machines, rather than wet clean-up methods.▪ Regularly collect and dispose of garbage and waste material.▪ Routinely inspect equipment to ensure that it is functioning properly without leaking and conduct preventative maintenance and needed repairs.▪ Train employees on proper clean up and spill response procedures.▪ Designate separate areas for auto parking, vehicle refueling and routine maintenance.▪ Promptly clean up leaks, drips and other spills.▪ Cover and maintain dumpsters and waste receptacles. Add additional dumpsters or increase frequency of waste collection if overflowing conditions reoccur.▪ For outdoor painting and sanding: Conduct activities in designated areas that provide adequate protection to prevent overspray and uncontrolled emissions. All operations should be conducted on paved surfaces to facilitate cleanup. Use portable containment as necessary for outside operations. Clean up and properly dispose of excess paint, paint chips, protective coatings, grit waste, etc.▪ Maintain vegetation on facility grounds in a manner that minimizes erosion. Follow the Landscape Maintenance and Pesticide, Herbicide and Fertilizer Usage CMs to ensure that minimum amounts of chemicals needed for healthy vegetation are applied to minimize transport of these materials in runoff. <p>Practice Procedures for Material Storage Practices:</p> <ul style="list-style-type: none">▪ Provide adequate aisle space to facilitate material transfer and access for inspection.		

-
- Store containers, drums, and bags away from direct traffic routes to reduce container damage resulting in accidental spills.
 - Stack containers according to manufacturer's instructions to avoid damaging the containers from improper weight distribution. Also store materials in accordance with directions in Material Safety Data Sheets (MSDSs).
 - Store containers on pallets or similar devices to prevent corrosion of containers that results from containers coming in contact with moisture on the ground.
 - Store toxic or hazardous liquids within curbed areas or secondary containers.

Practice Procedures for Material Inventory Practices: An up-to-date materials inventory can keep material costs down by preventing overstocking, track how materials are stored and handled onsite, and identify which materials and activities pose the most risk to the environment. Assign responsibility of hazardous material inventory to individuals trained to handle such materials. A material inventory should include these steps:

- Identify all chemical substances present at work site. Perform a walk-through of the site, review purchase orders, list all chemical substances used and obtain Material Safety Data Sheets (MSDS) for all chemicals.
- Label all containers with name and type of substance, stock number, expiration date, health hazards, handling suggestions, and first aid information. Find info on the MSDS.
- Clearly identify special handling, storage, use and disposal considerations for hazardous materials on the material inventory.
- Institute a shelf-life program to improve material tracking and inventory to reduce the amount of materials overstocked and ensure proper disposal of expired materials. Careful tracking of materials ordered can result in more efficient materials use. Decisions on the amounts of hazardous materials that are stored on site should include an evaluation-of any emergency control systems that are in place. All storage areas for hazardous materials should be designed to contain spills.

Practice Procedures for Training and Participation: Provide frequent and proper training in good housekeeping techniques to reduce mishandling of chemicals or equipment. Educate by:

- Discussing good housekeeping practices in training programs and meetings.
 - Publicizing pollution prevention concepts through posters or signs.
 - Posting bulletin boards with updated good housekeeping procedures and tips.
-

Place site-specific information here:

[Tailgate meetings, JSA's, Good Housekeeping Practices](#)

4.4 Vehicle Maintenance, Fueling and Storage

Instructions:

- Identify procedures by selecting the blue **Yes/NA** then type "Yes" or "NA".
- If applicable, CMs is required during all 3 phases of construction (initial, interim and final).

Vehicle Maintenance, Fueling and Storage	Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary	

Description: Areas where vehicles are fueled, maintained, and stored/parked can be pollutant "hot spots" that can result in hydrocarbons, trace metals, and other pollutants being transported in precipitation runoff. Proper fueling operations, storage of automotive fluids and effective spill cleanup procedures can help reduce contamination of stormwater runoff from vehicle maintenance and fueling facilities. Fuel-related spills can occur due to lack of attention during fueling or "topping off" fuel tanks. Common activities at construction sites include vehicle fluid replacement and equipment replacement and repair. Some of the wastes generated maintaining automobiles include solvents (degreasers, paint thinners, etc.), antifreeze, brake fluid, brake pad dust, battery acid, motor oil, fuel, and lubricating grease.

Uses: procedures are applicable to vehicle maintenance and fueling. Vehicle wash water is considered process wastewater that will not be discharged to the storm sewer system.

Practice Procedures for Vehicle Maintenance: The most effective way to minimize wastes generated by automotive maintenance activities is to prevent their production in the first place. The following practices will be implemented:

- Perform maintenance activities inside or under cover. When repairs cannot be performed indoors, use drip pans or absorbents.
- Keep equipment clean and free of excessive oil and grease buildup.
- Promptly cleanup spills using dry methods and properly dispose of waste. When water is required, use as little as possible to clean spills, leaks, and drips.
- Use a solvent collection service to collect spent solvent used for parts cleaning.
- When using liquids for cleaning, use a centralized station to ensure that solvents and residues stay in one area. Locate drip pans and draining boards to direct solvents back into a solvent sink or holding tank for reuse.
- Store used oil for recycling in labeled tanks. Locate used oil tanks and drums away from storm sewer, flowing streams, and preferably indoors.
- Use non-hazardous or less hazardous alternatives when practical. For example, replace chlorinated organic solvents with non-chlorinated ones like kerosene or mineral spirits.
- Properly recycle or dispose of grease, oil, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, worn parts, filters, and rags.
- Drain and crush oil filters before recycling or disposal.
- Drain all fluids and remove batteries from salvage vehicles and equipment.

-
- Closely monitor parked vehicles for leaks and place pans under leaks to collect the fluids for proper disposal or recycling.
 - Install berms or other measures to contain spills and prevent work surface runoff from entering storm sewer system.
 - Develop a spill prevention plan with measures such as spill kits, and information about location of storm drains and how to protect them if a large spill occurs.
 - Conduct periodic employee training to reinforce proper disposal practices.
 - Promptly transfer used fluids to recycling drums or hazardous waste containers.
 - Store cracked batteries in leak-proof secondary containers.
 - Inspect outdoor storage areas regularly for drips, spills and improperly stored materials (for example: unlabeled containers, auto parts that might contain grease or fluids, etc). This is particularly important for parking areas for vehicles awaiting repair.
 - Structural CMs, such as traps, installed in vehicle hotspot areas require routine cleanout of oil and grease. During heavy rainfall, cleanout is required more often to ensure that pollutants are not washed through the trap. Sediment removal is also required on a regular basis to keep the CM working efficiently.

Practice Procedures for Vehicle Fueling:

- Fueling areas should be designed to prevent stormwater runoff and spills. Fuel-dispensing areas should be paved with concrete or equivalent impervious surface, with an adequate slope to prevent ponding, and separated from the rest of the site by a grade break or berm to prevent run-on of precipitation.
 - For sites using a mobile fuel truck, establish a designated fueling area. Place temporary "caps" over nearby catch basins or manhole covers so that if a spill occurs, it is prevented from entering the storm sewer. Secondary containment should be used when transferring fuel from the tank truck to the fuel tank. Cover storm drains in the vicinity. Install vapor recovery nozzles to help control drips, and reduce air pollution.
 - Keep spill response information and spill cleanup materials onsite and readily available.
 - Employ dry cleanup methods cleaning up fuel spills. Such methods include sweeping to remove litter and debris, and using rags and absorbents for leaks and spills.
 - Water should not be used to wash fuel spill areas. During routine cleaning, use a damp cloth on the pumps and a damp mop on the pavement. Fuel dispensing nozzles should be fitted with automatic shutoff except where prohibited by fire department. Post signs at the fuel dispenser warning operators against "topping off" vehicle fuel tanks.
 - Provide written procedures describing CMs to employees who will be fueling.
-

Place site-specific information here:

[Perform all fueling activities within designated fueling area. Keep spill response information and spill cleanup kit readily available. Perform any spill responses per the spill response plan.](#)

4.5 Street Sweeping and Cleaning

Instructions:

- Identify CMs for the construction site by selecting the blue [Yes/NA](#) then type "Yes" or "N/A".
- If applicable, street sweeping shall be implemented for all 3 phases of construction (initial, interim and final).

Street Sweeping (SS)	Used: Yes	Phase(s): 1, 2, 3
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary	

Description: SS uses either manual or mechanical pavement cleaning practices to collect or vacuum sediment, litter and other debris from the streets before being washed into storm sewers by runoff. This practice can reduce pollutant loading to receiving waters, reduce clogging of storm sewer pipes, prolong the life of infiltration CMs and reduce clogging of outlet structures in detention ponds. Mechanical designs include: broom and conveyor belt sweeper, wet or dry vacuum-assisted sweepers, and regenerative-air sweepers. The effectiveness depends upon particle loadings being swept, street texture, moisture conditions, parked cars, equipment conditions and frequency of cleaning.

Uses: SS is a technique in urban areas where sediment and litter accumulated on streets is of concern for aesthetic, sanitary, water and air quality reasons. SS is required at construction sites per SWMP to reduce off-site tracking.

Procedures:

1. SS may be performed manually (broom and shovel) or with a vacuum sweeper (no kick-broom). Choose the most effective approach for site conditions.
2. SS shall be completed when there is sediment tracking from the construction site exits into the public road or right-of-way.
3. SS frequency depends on presence of sediment tracking. If tracking is occurring, either a VTC shall be installed, the VTC needs maintenance, or the VTC is inadequate; all require SWMP updates.
4. Off-site sediment tracking from the construction site shall be swept immediately.
5. Conduct SS prior to precipitation events.
6. Operate sweepers at manufacturer recommended optimal speed levels.
7. Regularly inspect vehicles and equipment for leaks and repair promptly.
8. Keep accurate logs of number of curb-miles swept and amount of waste collected.
9. Dispose of SS debris and dirt at a landfill.
10. Do not store swept material along the side of the street or near a storm drain inlet.

Place site-specific information here:

[Perform sweeping at the end of each work day, with increased sweeping schedules during high trackout conditions.](#)

4.6 Storm Sewer Cleaning

Instructions:

- Select CMs to remove accumulated sediment, trash, and other pollutants from the storm system for the applicable construction site wastes identified in **Section 1.8 Potential Sources of Pollution** to maintain a clean and orderly construction site.
- Identify CMs by selecting the blue **Yes/NA** then type "Yes" or "N/A". If applicable, the following practices shall be implemented for all 3 phases of construction (initial, interim and final).

Storm Sewer System Cleaning	Used: NA	Phase(s): 1, 2,3
<input type="checkbox"/> Permanent	<input checked="" type="checkbox"/> Temporary	
<p>Description: Periodic storm sewer cleaning can help remove accumulated sediment, trash, and other pollutants from the storm system including inlets, pipes and also construction CMs. Routine cleaning reduces the amount of pollutants in the storm system and in receiving waters. Clogged drains can cause overflow, leading to increase erosion. Cleaning increases dissolved oxygen, reduces levels of bacteria, and supports in-stream habitat. Areas with flat grades or low flows should be given special attention because they rarely achieve high enough flows to flush themselves. Water used in storm drain cleaning must be collected and properly disposed of, typically at a sanitary wastewater treatment facility. Simpler methods in localized areas can also include manual trash collection and shoveling sediment and debris from inlets and outlets. Frequency and prioritization of storm sewer cleaning is affected by the activity and intensity of construction and the proper installation and maintenance for construction CMs.</p> <p>Uses: Inspection of the existing storm system is recommended prior construction to document condition. The storm sewer shall be cleaned at minimum at completion of construction.</p> <p>Practice Guidelines: Inspect the storm system as part of the required stormwater inspection.</p> <ul style="list-style-type: none">▪ Technology available: manual cleaning (shovel), vacuum cleaning and vacuum combination jet cleaning. Choose the most effective approach for site conditions.▪ Staff training: train about maintenance, waste collection and disposal methods.▪ Waste disposal: Most catch basin waste is acceptable for landfills. If hazardous material is suspected, it should be tested and disposed of accordingly.		

Place site specific information here:

INSERT TEXT HERE

SECTION 5: STORMWATER INSPECTIONS

5.1 Inspections

Instructions:

Identify the individual responsible for conducting inspections and describe qualifications. Certifications, such as "Certified Inspector of Sediment and Erosion Control" (CISEC), or equivalent, are recommended.

Select the frequency of inspections and procedures to inspect CMs that will occur at your site.

Identify procedures to document the repairs and maintenance of CMs as a result of the inspections.

Use the Stormwater Inspection Form in **Appendix 7**. Place completed stormwater inspections in **Appendix 9**.

1. Inspection Personnel:

Identify the person(s) who will be responsible for conducting stormwater inspections and describe their qualifications:

Chris Heilbrun

CPESC, CESCL, QSM

2. Inspection Frequency:

Inspections shall start within 7 calendar days of commencement of construction activities.

Minimum Stormwater Inspection Schedule: A thorough inspection of the site inspection shall be performed in accordance with one of the following minimum frequencies:

- At least one inspection every 7 calendar days, **or**
- At least one inspection every 14 calendar days, if post-storm event inspections are conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. Post-storm inspections may be used to fulfill the 14-day routine inspection requirement.

Post-Storm Inspections at Temporarily Idle Sites - For permittees choosing to combine 14-day inspections and post-storm-event inspections, if no construction activities will occur following a storm event, post-storm event inspections must be conducted prior to re-commencing construction activities, but no later than 72 hours following the storm event. The delay of any post-storm event inspection must be documented in the inspection record. Routine inspections must still be conducted at least every 14 calendar days.

Inspections at Completed Sites/Areas - When the site, or portions of a site are awaiting establishment of a vegetative ground cover and final stabilization, the permittee must conduct a thorough inspection of the stormwater management system at least once every 30 days. Post-storm event inspections are not required under this schedule. This reduced inspection schedule is allowed if all of the following criteria are met:

- i. All construction activities resulting in ground disturbance are complete;
- ii. All activities required for final stabilization, in accordance with the SWMP, have been completed, with the exception of the application of seed that has

not occurred due to seasonal conditions or the necessity for additional seed application to augment previous efforts; and

- iii. The SWMP has been amended to locate those areas to be inspected in accordance with the reduced schedule allowed for in this paragraph.

The minimum inspection frequency required does not affect the permittee's responsibility to implement and maintain effective control measures as prescribed in the SWMP. Proper maintenance may require more frequent inspections.

3. Inspection Procedures:

- At minimum, inspect the construction site perimeter, all disturbed area, designated haul routes, material and/or waste storage areas that are exposed to precipitation, discharge location, and locations where vehicles exit the site shall be inspected for evidence of, or the potential for, pollutants leaving the Permitted boundaries, entering the storm sewer system, or discharging to the MS4.
- Refer to **Section 5.3 Inspection Sequence**.
- Visually verify whether all implemented CMs are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges.
- Determine if there are new potential sources of pollutants.
- Assess the adequacy of CMs at the site to identify areas requiring new or modified CMs to minimize pollutant discharges.
- Identify all areas of non-compliance and implement corrective action.

4. Correcting Problems:

Take steps to minimize the discharge of pollutants until a CM is implemented and operational, or an inadequate CM is replaced or corrected, and returned to effective operating condition. If it is infeasible to install or repair the CM immediately after discovering the deficiency, the following must be documented:

- (a) Describe why it is infeasible to initiate the installation or repair immediately; and
- (b) Provide a schedule for installing or repairing the CM and returning it to an effective operating condition asap.

Remove and properly dispose of any unauthorized release or discharge. Clean up any contaminated surfaces to minimize discharges of the material in subsequent storm events.

INSERT ADDITIONAL INFORMATION ABOUT CORRECTING ISSUES HERE

Responsible staff or company for making corrections: [Williams Front Range, LLC](#).

5. Inspection Form:

Use the form (or equivalent) in **Appendix 7**. Place completed inspections in **Appendix 9**. Document: Inspection date, name & title of inspector; weather conditions; phase of construction; estimated acreage of disturbance at the time of inspection; location(s) of discharges of sediment or other pollutants from the site; location(s) of CMs needing maintenance; location(s) and identification of inadequate CMs; location(s) and identification of additional CMs needed that were not in place at the time of inspection; description of the minimum inspection frequency; deviations from the minimum inspection schedule; certification statement for corrective action(s) or inspection (if no actions).

5.2 *Delegation of Authority*

Instructions:

- Delegation of Authority is **optional**. Attach a copy of the signed delegation of authority form in **Appendix 8**.
- Identify the individual(s) or specifically describe the position where the construction site operator has delegated authority for the purposes of signing inspection reports, certifications, or other information.

Duly Authorized Representative(s) or Position(s):

5.3 Inspection Sequence

Instructions:

When conducting stormwater inspections of your construction site it is recommended that one always follows this recommended inspection sequence to ensure that all procedures and measures are being followed.

Place all completed inspections in **Appendix 9**.

1. Plan the stormwater inspection

- Use the inspection form (or equivalent) under **Appendix 7**.
- Obtain a copy of the EC Plan (Site Map) with CMs locations marked.
- Plan to walk the entire site, including discharge points from the site and any off-site support activities.
- Follow a consistent pattern each time to ensure you inspect all areas.

2. Determine Inspection frequency

- Site inspections must be conducted at least once every 7; **or** 14 calendar days.
- If 14-day inspections, then post-storm inspections must be conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion.
- 30-day inspections are conducted once construction is complete, temporary stabilizations has been installed and the site is waiting to reach final stabilization.

3. Inspect discharge points and downstream, off-site areas

- Inspect discharge locations to determine whether erosion and sediment control measures are effective.
- Inspect nearby downstream locations.
- Walk down the street to inspect off-site areas for signs of discharges.
- Inspect down slope existing catch basins to ensure they are free of sediment and other pollutants and to ensure that they are adequately protected.

4. Inspect perimeter controls and slopes

- Inspect perimeter controls to determine if sediment should be removed.
- Check the structural integrity of the CM. Determine if CM replacement is needed.
- Inspect slopes and temporary stockpiles to determine if erosion controls are effective.

5. Compare CMs in the EC Plan with the construction site conditions

- Determine whether CMs are in place as required by the EC plan.
- Evaluate whether CMs have been adequately installed and maintained.
- Look for areas where CMs are needed but are missing on the field, or are not documented on the SWMP.

6. Inspect construction site entrances

- Inspect the construction exits to determine if there is tracking of sediment from the site onto the street.
- Refresh or replace the rock in designated entrances and concrete washout areas.
- Look for evidence of additional construction exits being used that are not in the SWMP or are not stabilized.
- Sweep the street if there is evidence of sediment accumulation.

7. Inspect sediment controls

- Inspect any sediment basins for sediment accumulation.
- Remove sediment when it reduces the capacity of the basin by $\frac{1}{3}$ of the design storage volume.

8. Inspect pollution prevention and good housekeeping practices

- Inspect trash areas to ensure that waste is properly contained.
- Inspect material storage and staging areas to verify that potential pollutant sources are not exposed to stormwater runoff.
- Verify that concrete, paint, and stucco washouts are being used properly and are correctly sized for the volume of wash water.
- Inspect vehicle/equipment fueling and maintenance areas for signs of stormwater pollutant exposure.

9. Inspect for final stabilization

- Inspect all temporary and permanent CMs for correct application and installation with the CM details.
- Remove sediment from the private storm sewer system - do not jet pollutants down into the public storm sewer system.

5.4 Common Compliance Problems

The following are problems commonly found at construction sites:

Problem #1 - Not using phased grading or providing temporary or permanent soil stabilization

Problem #2 - No sediment controls on-site

Problem #3 - No sediment control for temporary stockpiles

Problem #4 - No inlet protection

Problem #5 - No CMs or inadequate CMs to minimize vehicle tracking onto the road

Problem #6 - Inadequate or improper solid waste or hazardous waste management

Problem #7 - Unpermitted dewatering and other pollutant discharge at the construction site

Problem #8 - Poorly managed washouts (concrete, paint, stucco)

Problem #9 - Inadequate maintenance of CMs

Problem #10 - Inadequate documentation

Required Non-Compliance Notifications

Report non-compliance orally within twenty-four (24) hours from the time of awareness, and mail to the State a written report within five (5) working days after if:

- Any non-compliance issues which may endanger health or the environment regardless of the cause of the incident (these types of circumstances would primarily result from the discharge of pollutants in violation of the Construction Stormwater Permit);
- Any un-anticipated bypass which exceeds any effluent limitations in the Construction Stormwater Permit
- Any upset which causes an exceedance of any effluent limitation in the Construction Stormwater Permit
- Any daily maximum violations for any of the pollutants limited by Part I of the Construction Stormwater Permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance (these types of circumstances would primarily result from an exceedance of a numeric effluent).

SECTION 6: RECORDKEEPING

6.1 Recordkeeping

Instructions:

The following section provides a list of records that shall be kept available at your construction site for review, including the length of time those records shall be preserved for.

The following records shall be kept available at the construction site, or be on-site when construction activities are occurring:

- ✓ An updated SWMP, reflecting current conditions and CMs.
- ✓ Keep record of SWMP/EC Plan changes made including the date and identification of the changes (*).
- ✓ Completed inspection reports, which shall be placed in **Appendix 9**.
- ✓ Any document or plan incorporated by reference to the SWMP.

Specify where will the SWMP be located on-site:

Stored electronically

<https://compliancego.com/>

(*) The SWMP must be amended when the following occurs:

- 1) A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
- 2) The SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
- 3) Control measures identified in the SWMP are no longer necessary and are removed; and
- 4) Corrective actions are taken onsite that result in a change to the SWMP.

A notation must be included in the SWMP to identify the date of the site change, the control measure removed, or modified, the location(s) of those control measures, and any changes to the control measure(s). The permittee must ensure the site changes are reflected in the SWMP. The permittee is non-compliant with the permit until the SWMP revisions have been made

SWMP documentation required under this permit are considered reports that must be available to the public under Section 308(b) of the CWA and Section 61.5(4) of the CDPS regulations. The permittee must make plans available to members of the public upon request. However, the permittee may claim any portion of a SWMP as confidential in accordance with 40 CFR Part 2.

Records will be retained for a minimum period of at least 3 years after the CDPHE permit is terminated.

SECTION 7: FINAL STABILIZATION

7.1 Final Stabilization Requirement

Instructions:

Final stabilization of the construction sites occurs when there is 70% uniform vegetated cover. The vegetation **MUST** be uniform so that there are no open patches of soil.

Final Stabilization means that all land disturbing activities are complete, and all disturbed areas have either been built on, paved over or a uniform vegetative cover has been established per SWMP. Prior to closing the State and County Stormwater Permit, all the items listed below must be completed in order for the construction site to be considered to have final stabilization.

1. The site has a uniform vegetative cover with a density of at least 70% compared to the original undisturbed site. Such cover must be capable of adequately controlling soil erosion.
2. If applicable, proper installation and maintenance of all approved, permanent, post-construction stormwater quality treatment drainage facilities.
3. Removal of all stockpiles of soil, construction material/debris, construction equipment, etc. from the construction site.
4. Streets, parking lots and other surrounding paved surfaces are clean and free of any sediment or debris.
5. Removal of sediment, debris or other pollutants within the private and adjacent public storm drainage system.
6. Restoration of any damaged public infrastructure caused by the construction activities.

7.2 Removal of Temporary CMs

Once the site has met the final stabilization conditions, the remaining temporary CMs such as perimeter controls, inlet protection, silt fence, etc. shall be removed and disposed of properly.

7.3 Stormwater Permits Close-out

Contact the County to close the local Stormwater Permit.

Submit the CDPS Stormwater Discharge Permit Inactivation Form to the State of Colorado, CDPHE.

7.4 Final Stabilization Measures

Instructions:

Describe CMs for final stabilization of all disturbed areas at the site, such as: erosion control blankets, mulch and seeding, approved landscape plan, etc. Update the EC Plan (site map) to indicate areas that have achieved final stabilization.

Permanent Seeding (PS)	Used: Yes	Phase(s): 3
<input checked="" type="checkbox"/> Permanent	<input type="checkbox"/> Temporary	
Dryland Pasture Mix Drill Seed Application Reincorporate topsoil layer. Rip soil, drill seed, crimp mulch		
Soil Stabilization Method	Used: Yes	Phase(s): 3
<input checked="" type="checkbox"/> Permanent	<input type="checkbox"/> Temporary	
Crimped Straw		
Others:		
<input checked="" type="checkbox"/> Permanent	<input type="checkbox"/> Temporary	
INSERT PAVEMENT	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		
INSERT HARDSCAPE	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		
INSERT XERISCAPE	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		
INSERT LANDSCAPE PLAN	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		
STABLE DRIVING SURFACES	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		
INSERT OTHER	Used: Yes/No	Phase(s): 3 <input type="checkbox"/> Permanent - <input type="checkbox"/> Temporary
Describe: INSERT TEXT HERE		

For additional CMs, repeat as needed here

7.6 Long Term Stormwater Management

Instructions:

Describe planned water quality drainage facilities to control pollutants in stormwater discharges that will be installed and remain after construction operations are completed. Including, but not limited to, water quality detention basin, rain gardens, underground hydrodynamic separators, etc.

Describe type and location of the permanent water quality drainage facilities designed to control pollutants in stormwater discharges that will remain after construction operations are completed:

N/A

Recorded Access and Drainage Easement over water quality facility: N/A

N/A

Operation and Maintenance (O&M) Plan for the water quality facility: N/A

If applicable: Submit copy to the O&M plan to the County for approval

SECTION 8: STORMWATER VIOLATIONS

8.1 Stormwater Violations

Federal, State and Local jurisdictions are able to enforce their respective Stormwater Pollution Prevention Regulations upon the Permittee or violator of these regulations. Administrative or judicial enforcement tools vary and may involve written warning, notice of violation, stop work order, permit revocation, surety withdrawal, civil or criminal penalties, which may require abatement of any violation, etc.

VIOLATIONS ARE SUBJECT TO ENFORCEMENT FROM THE TIME THE VIOLATION STARTS

8.2 Potential Stormwater Violations

The following items are considered a violation:

1. Conducting a permit covered activity without a local Stormwater Permit.
2. Conducting construction activities outside the permitted boundary of the local Stormwater Permit.
3. Failure to prepare a SWMP.
4. Failure to prepare an Erosion Control (EC) Plan, aka Site Map.
5. Conducting a permit covered activity without County/City's SWMP approval.
6. Conducting construction activity without a State CDPS Stormwater Discharge Permit.
7. Failure to renew Stormwater Permits.
8. Failure to renew financial surety.
9. Deficient SWMP.
10. Failure to update the SWMP adequately to reflect current site conditions.
11. Failure to install, maintain or properly select Control Measures (CM), aka Best Management Practices (BMP).
12. Failure to correct findings from previous City/County Regulatory Inspections
13. Failure to perform stormwater inspections of the permitted construction site.
14. Failure to submit requested documentation to the City/County.
15. Failure to adequately respond to the City/County's written directives.
16. Failure to install permanent post-construction BMPs (if applicable).
17. Lack of good housekeeping practices.
18. Pollution, contamination or degradation of stormwater quality.
19. An illicit discharge into the City/County's Municipal Separate Storm Sewer System (MS4).

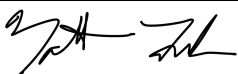
SECTION 9: SWMP CERTIFICATION

9.1 SWMP Certification Statement

Instructions:

The Permittee shall certify the SWMP by signing the certification statement below. It is recommended that all subcontractors sign the Subcontractor Certifications/Agreements in **Appendix 10**.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	<u>Nathan Fronk</u>	Title:	<u>Environmental Specialist III</u>
Signature:	<u></u>	Date:	<u>11/12/2025</u>

SWMP APPENDICES

Attach the following documentation:

<i>Appendix 1 - Project Vicinity Map</i>	<i>(Section 1.1)</i>
<i>Appendix 2 - State CDPS Stormwater Construction Permit + Local Permit</i>	<i>(Section 1.2)</i>
<i>Appendix 3 - Pre-disturbance Photos</i>	<i>(Section 1.4)</i>
<i>Appendix 4 -Demolition Permit and State Asbestos Permit</i>	<i>(Section 1.9)</i>
<i>Appendix 5 - Erosion and Sediment BMPs/CMs Details</i>	<i>(Section 1.10)</i>
<i>Appendix 6 - Erosion Control Plan (EC Plan) - Site Map</i>	<i>(Section 2.10)</i>
<i>Appendix 7 - Stormwater Inspection Form (Template)</i>	<i>(Section 5.1)</i>
<i>Appendix 8 - Delegation of Authority (optional)</i>	<i>(Section 5.2)</i>
<i>Appendix 9 - Completed Stormwater Inspection Logs</i>	<i>(Sections 5.3 & 5.5)</i>
<i>Appendix 10 - Subcontractor Certifications/Agreements (optional)</i>	<i>(Section 9.1)</i>
<i>Appendix 11 - Agreement for off-site Control Measures (if applicable)</i>	<i>(Section 1.5)</i>
<i>Appendix 12 - Low Risk Guidance for Discharges of Potable Water</i>	<i>(Section 1.8 & 1.9)</i>
<i>Appendix 13 – Erosion and Sediment Control General Notes</i>	<i>(Section 3.2)</i>

APPENDIX 1: Project Vicinity Map



APPENDIX 2: CDPHE Stormwater Construction Permit + Local Stormwater Permit



COLORADO

Department of Public
Health & Environment

**CERTIFICATION TO DISCHARGE
UNDER
CDPS GENERAL PERMIT COR400000
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY**

Certification Number: **COR401222**

This Certification to Discharge specifically authorizes:

**Owner Williams Front Range, LLC.
Operator Williams Front Range, LLC.**
to discharge stormwater from the facility identified as

Permit Area #1

To the waters of the State of Colorado, including, but not limited to:

South Platte River

Facility Activity :	Midstream facilities such as compressor stations and gas plants
Disturbed Acres:	600 acres
Facility Located at:	Eastern Weld county uninc 80504 Weld County Latitude 40.52392 Longitude -104.20446
Specific Information (if applicable):	Area wide oil and gas midstream operations permit coverage

Certification is issued: 04/03/2024

Certification is effective: 04/01/2024

Expiration date of general permit: 3/31/2029

This certification under the general permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the COR400000 permit.

This certification was approved by:
Andrew Sayers-Fay Permits Section Manager
Clean Water Program
Water Quality Control Division



APPENDIX 3: Pre-Disturbance Photos

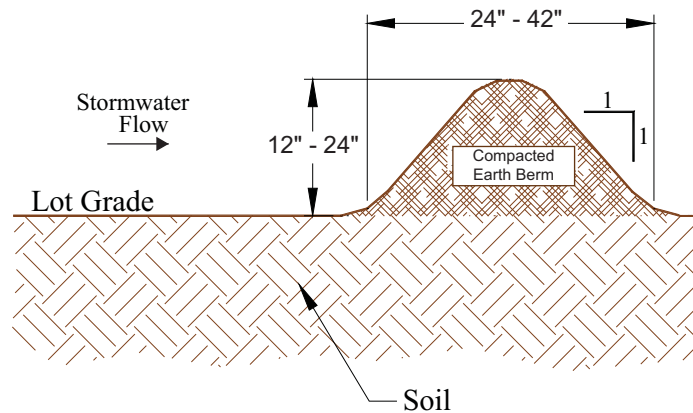
(ADD COLOR PICTURES)



APPENDIX 4: Local Demolition Permit + State Asbestos Permit

APPENDIX 5: Erosion & Sediment CMs/BMPs Details

Compacted Earth Berm (CEB)



Definition

A temporary compacted dirt berm used as a perimeter control to intercept sediment laden runoff from construction sites. It is composed of top soil and is used as a substitute for silt fence, sediment control log, etc. on construction sites that are uniformly graded where sheet flow rather than concentrated flow conditions exist.

Purpose

The purpose is to reduce the velocity of sediment laden water causing sediment deposition in front of the berm. The berm can also have a filtering effect on sediment laden water.

Conditions Where The Practice Applies

Use compacted dirt berms in place of silt fence, sediment control log, etc. where conditions and regulations allow. Vehicles or equipment can be driven over the berm, however the dimensions of the berm must be maintained for effectiveness. After construction, the material can be graded out, followed by stabilization (e.g. permanent stabilization). The use of this practice is not recommended around perimeters of large drainage areas such as developments. Common areas for compacted dirt berms are at the toe of stockpiles and back of curb of home construction lots.

Design Criteria

Unless otherwise directed, construct a 18-24" wide by 12" high berm as shown above. In some special cases where the drainage area is larger than a normal lot size, increase the dimensions to 24" high and 36" - 42" wide.

A tackifier or spray may be applied for additional strength or effectiveness if necessary. Follow the manufacturer's recommendations when using additives. Do not use chemically pressure treated waste lumber.

Maintenance

Frequent maintenance may be required to insure the BMP's effectiveness. Hand raking may be necessary to maintain the berm. Routinely inspect and maintain the berm in a functional condition at all times. Correct deficiencies immediately. Remove sediment after it has reached 1/3 of the height of the berm. Disperse berm or leave in place as directed after the lot has received final stabilization.

Description

Wind erosion and dust control BMPs help to keep soil particles from entering the air as a result of land disturbing construction activities. These BMPs include a variety of practices generally focused on either graded disturbed areas or construction roadways. For graded areas, practices such as seeding and mulching, use of soil binders, site watering, or other practices that provide prompt surface cover should be used. For construction roadways, road watering and stabilized surfaces should be considered.



Photograph DC-1. Water truck used for dust suppression. Photo courtesy of Douglas County.

Appropriate Uses

Dust control measures should be used on any site where dust poses a problem to air quality. Dust control is important to control for the health of construction workers and surrounding waterbodies.

Design and Installation

The following construction BMPs can be used for dust control:

- An irrigation/sprinkler system can be used to wet the top layer of disturbed soil to help keep dry soil particles from becoming airborne.
- Seeding and mulching can be used to stabilize disturbed surfaces and reduce dust emissions.
- Protecting existing vegetation can help to slow wind velocities across the ground surface, thereby limiting the likelihood of soil particles to become airborne.
- Spray-on soil binders form a bond between soil particles keeping them grounded. Chemical treatments may require additional permitting requirements. Potential impacts to surrounding waterways and habitat must be considered prior to use.
- Placing rock on construction roadways and entrances will help keep dust to a minimum across the construction site.
- Wind fences can be installed on site to reduce wind speeds. Install fences perpendicular to the prevailing wind direction for maximum effectiveness.

Maintenance and Removal

When using an irrigation/sprinkler control system to aid in dust control, be careful not to overwater. Overwatering will cause construction vehicles to track mud off-site.

Wind Erosion Control/ Dust Control	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	Moderate

Description

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous construction-related materials and wastes. Stormwater Management Plans (SWMPs) should clearly specify BMPs including these good housekeeping practices:

- Provide for waste management.
- Establish proper building material staging areas.
- Designate paint and concrete washout areas.
- Establish proper equipment/vehicle fueling and maintenance practices.
- Control equipment/vehicle washing and allowable non-stormwater discharges.
- Develop a spill prevention and response plan.

Acknowledgement: This Fact Sheet is based directly on EPA guidance provided in *Developing Your Stormwater Pollution Prevention Plan* (EPA 2007).

Appropriate Uses

Good housekeeping practices are necessary at all construction sites.

Design and Installation

The following principles and actions should be addressed in SWMPs:

- **Provide for Waste Management.** Implement management procedures and practices to prevent or reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes that will be generated at the site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be considered include:

Solid or Construction Waste

- Designate trash and bulk waste-collection areas on-site.



Photographs GH-1 and GH-2. Proper materials storage and secondary containment for fuel tanks are important good housekeeping practices. Photos courtesy of CDOT and City of Aurora.

Good Housekeeping	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

- Recycle materials whenever possible (e.g., paper, wood, concrete, oil).
- Segregate and provide proper disposal options for hazardous material wastes.
- Clean up litter and debris from the construction site daily.
- Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.
- Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- Maintain clean restroom facilities and empty portable toilets regularly.
- Where possible, provide secondary containment pans under portable toilets.
- Provide tie-downs or stake-downs for portable toilets.
- Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.



Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WWE.

- Hazardous waste containers should be inspected to ensure that all containers are labeled properly and that no leaks are present.
- **Establish Proper Building Material Handling and Staging Areas.** The SWMP should include comprehensive handling and management procedures for building materials, especially those that are hazardous or toxic. Paints, solvents, pesticides, fuels and oils, other hazardous materials or building materials that have the potential to contaminate stormwater should be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment measures prevent a spill from spreading across the site and may include dikes, berms, curbing, or other containment methods. Secondary containment techniques should also ensure the protection of groundwater. Designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and other potential pollutants. Designated staging areas enable easier monitoring of the use of materials and clean up of spills. Training employees and subcontractors is essential to the success of this pollution prevention principle. Consider the following specific materials handling and staging practices:
 - Train employees and subcontractors in proper handling and storage practices.
 - Clearly designate site areas for staging and storage with signs and on construction drawings. Staging areas should be located in areas central to the construction site. Segment the staging area into sub-areas designated for vehicles, equipment, or stockpiles. Construction entrances and exits should be clearly marked so that delivery vehicles enter/exit through stabilized areas with vehicle tracking controls (See Vehicle Tracking Control Fact Sheet).
 - Provide storage in accordance with Spill Protection, Control and Countermeasures (SPCC) requirements and plans and provide cover and impermeable perimeter control, as necessary, for hazardous materials and contaminated soils that must be stored on site.
 - Ensure that storage containers are regularly inspected for leaks, corrosion, support or foundation failure, or other signs of deterioration and tested for soundness.
 - Reuse and recycle construction materials when possible.
- **Designate Concrete Washout Areas.** Concrete contractors should be encouraged to use the washout facilities at their own plants or dispatch facilities when feasible; however, concrete washout commonly occurs on construction sites. If it is necessary to provide for concrete washout areas on-site, designate specific washout areas and design facilities to handle anticipated washout water. Washout areas should also be provided for paint and stucco operations. Because washout areas can be a source of pollutants from leaks or spills, care must be taken with regard to their placement and proper use. See the Concrete Washout Area Fact Sheet for detailed guidance.

Both self-constructed and prefabricated washout containers can fill up quickly when concrete, paint, and stucco work are occurring on large portions of the site. Be sure to check for evidence that contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities. If the washout areas are not being used regularly, consider posting additional signage, relocating the facilities to more convenient locations, or providing training to workers and contractors.

When concrete, paint, or stucco is part of the construction process, consider these practices which will help prevent contamination of stormwater. Include the locations of these areas and the maintenance and inspection procedures in the SWMP.

- Do not washout concrete trucks or equipment into storm drains, streets, gutters, uncontained areas, or streams. Only use designated washout areas.
- Establish washout areas and advertise their locations with signs. Ensure that signage remains in good repair.
- Provide adequate containment for the amount of wash water that will be used.
- Inspect washout structures daily to detect leaks or tears and to identify when materials need to be removed.
- Dispose of materials properly. The preferred method is to allow the water to evaporate and to recycle the hardened concrete. Full service companies may provide dewatering services and should dispose of wastewater properly. Concrete wash water can be highly polluted. It should not be discharged to any surface water, storm sewer system, or allowed to infiltrate into the ground in the vicinity of waterbodies. Washwater should not be discharged to a sanitary sewer system without first receiving written permission from the system operator.
- **Establish Proper Equipment/Vehicle Fueling and Maintenance Practices.** Create a clearly designated on-site fueling and maintenance area that is clean and dry. The on-site fueling area should have a spill kit, and staff should know how to use it. If possible, conduct vehicle fueling and maintenance activities in a covered area. Consider the following practices to help prevent the discharge of pollutants to stormwater from equipment/vehicle fueling and maintenance. Include the locations of designated fueling and maintenance areas and inspection and maintenance procedures in the SWMP.
 - Train employees and subcontractors in proper fueling procedures (stay with vehicles during fueling, proper use of pumps, emergency shutoff valves, etc.).
 - Inspect on-site vehicles and equipment regularly for leaks, equipment damage, and other service problems.
 - Clearly designate vehicle/equipment service areas away from drainage facilities and watercourses to prevent stormwater run-on and runoff.
 - Use drip pans, drip cloths, or absorbent pads when replacing spent fluids.
 - Collect all spent fluids, store in appropriate labeled containers in the proper storage areas, and recycle fluids whenever possible.
- **Control Equipment/Vehicle Washing and Allowable Non-Stormwater Discharges.** Implement practices to prevent contamination of surface and groundwater from equipment and vehicle wash water. Representative practices include:
 - Educate employees and subcontractors on proper washing procedures.
 - Use off-site washing facilities, when available.
 - Clearly mark the washing areas and inform workers that all washing must occur in this area.
 - Contain wash water and treat it using BMPs. Infiltrate washwater when possible, but maintain separation from drainage paths and waterbodies.

- Use high-pressure water spray at vehicle washing facilities without detergents. Water alone can remove most dirt adequately.
- Do not conduct other activities, such as vehicle repairs, in the wash area.
- Include the location of the washing facilities and the inspection and maintenance procedures in the SWMP.
- **Develop a Spill Prevention and Response Plan.** Spill prevention and response procedures must be identified in the SWMP. Representative procedures include identifying ways to reduce the chance of spills, stop the source of spills, contain and clean up spills, dispose of materials contaminated by spills, and train personnel responsible for spill prevention and response. The plan should also specify material handling procedures and storage requirements and ensure that clear and concise spill cleanup procedures are provided and posted for areas in which spills may potentially occur. When developing a spill prevention plan, include the following:
 - Note the locations of chemical storage areas, storm drains, tributary drainage areas, surface waterbodies on or near the site, and measures to stop spills from leaving the site.
 - Provide proper handling and safety procedures for each type of waste. Keep Material Safety Data Sheets (MSDSs) for chemical used on site with the SWMP.
 - Establish an education program for employees and subcontractors on the potential hazards to humans and the environment from spills and leaks.
 - Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities to request assistance. Emergency procedures and contact numbers should be provided in the SWMP and posted at storage locations.
 - Describe the procedures, equipment and materials for immediate cleanup of spills and proper disposal.
 - Identify personnel responsible for implementing the plan in the event of a spill. Update the spill prevention plan and clean up materials as changes occur to the types of chemicals stored and used at the facility.

Spill Prevention, Control, and Countermeasure (SPCC) Plan

Construction sites may be subject to 40 CFR Part 112 regulations that require the preparation and implementation of a SPCC Plan to prevent oil spills from aboveground and underground storage tanks. The facility is subject to this rule if it is a non-transportation-related facility that:

- Has a total storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.
- Could reasonably be expected to discharge oil in quantities that may be harmful to navigable waters of the United States and adjoining shorelines.

Furthermore, if the facility is subject to 40 CFR Part 112, the SWMP should reference the SPCC Plan. To find out more about SPCC Plans, see EPA's website on SPCC at www.epa.gov/oilspill/spcc.htm.

Reporting Oil Spills

In the event of an oil spill, contact the National Response Center toll free at 1-800-424- 8802 for assistance, or for more details, visit their website: www.nrc.uscg.mil.

Maintenance and Removal

Effective implementation of good housekeeping practices is dependent on clear designation of personnel responsible for supervising and implementing good housekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, vehicle and equipment maintenance, and other practices. Emergency response "drills" may aid in emergency preparedness.

Checklists may be helpful in good housekeeping efforts.

Staging and storage areas require permanent stabilization when the areas are no longer being used for construction-related activities.

Construction-related materials, debris and waste must be removed from the construction site once construction is complete.

Design Details

See the following Fact Sheets for related Design Details:

MM-1 Concrete Washout Area

MM-2 Stockpile Management

SM-4 Vehicle Tracking Control

Design details are not necessary for other good housekeeping practices; however, be sure to designate where specific practices will occur on the appropriate construction drawings.

Description

Effective construction site management to minimize erosion and sediment transport includes attention to construction phasing, scheduling, and sequencing of land disturbing activities. On most construction projects, erosion and sediment controls will need to be adjusted as the project progresses and should be documented in the SWMP.

Construction phasing refers to disturbing only part of a site at a time to limit the potential for erosion from dormant parts of a site. Grading activities and construction are completed and soils are effectively stabilized on one part of a site before grading and construction begins on another portion of the site.



Photograph CP-1. Construction phasing to avoid disturbing the entire area at one time. Photo courtesy of WWE.

Construction sequencing or scheduling refers to a specified work schedule that coordinates the timing of land disturbing activities and the installation of erosion and sediment control practices.

Appropriate Uses

All construction projects can benefit from upfront planning to phase and sequence construction activities to minimize the extent and duration of disturbance. Larger projects and linear construction projects may benefit most from construction sequencing or phasing, but even small projects can benefit from construction sequencing that minimizes the duration of disturbance.

Typically, erosion and sediment controls needed at a site will change as a site progresses through the major phases of construction. Erosion and sediment control practices corresponding to each phase of construction must be documented in the SWMP.

Design and Installation

BMPs appropriate to the major phases of development should be identified on construction drawings. In some cases, it will be necessary to provide several drawings showing construction-phase BMPs placed according to stages of development (e.g., clearing and grading, utility installation, active construction, final stabilization). Some municipalities in the Denver area set maximum sizes for disturbed area associated with phases of a construction project. Additionally, requirements for phased construction drawings vary among local governments within the UDFCD boundary. Some local governments require separate erosion and sediment control drawings for initial BMPs, interim conditions (in active construction), and final stabilization.

Construction Scheduling	
Functions	
Erosion Control	Moderate
Sediment Control	Moderate
Site/Material Management	Yes

Typical construction phasing BMPs include:

- Limit the amount of disturbed area at any given time on a site to the extent practical. For example, a 100-acre subdivision might be constructed in five phases of 20 acres each.
- If there is carryover of stockpiled material from one phase to the next, position carryover material in a location easily accessible for the pending phase that will not require disturbance of stabilized areas to access the stockpile. Particularly with regard to efforts to balance cut and fill at a site, careful planning for location of stockpiles is important.

Typical construction sequencing BMPs include:

- Sequence construction activities to minimize duration of soil disturbance and exposure. For example, when multiple utilities will occupy the same trench, schedule installation so that the trench does not have to be closed and opened multiple times.
- Schedule site stabilization activities (e.g., landscaping, seeding and mulching, installation of erosion control blankets) as soon as feasible following grading.
- Install initial erosion and sediment control practices before construction begins. Promptly install additional BMPs for inlet protection, stabilization, etc., as construction activities are completed.

Table CP-1 provides typical sequencing of construction activities and associated BMPs.

Maintenance and Removal

When the construction schedule is altered, erosion and sediment control measures in the SWMP and construction drawings should be appropriately adjusted to reflect actual "on the ground" conditions at the construction site. Be aware that changes in construction schedules can have significant implications for site stabilization, particularly with regard to establishment of vegetative cover.

Table CP-1. Typical Phased BMP Installation for Construction Projects

Project Phase	BMPs
Pre-disturbance, Site Access	<ul style="list-style-type: none"> Install sediment controls downgradient of access point (on paved streets this may consist of inlet protection). Establish vehicle tracking control at entrances to paved streets. Fence as needed. Use construction fencing to define the boundaries of the project and limit access to areas of the site that are not to be disturbed. <p>Note: it may be necessary to protect inlets in the general vicinity of the site, even if not downgradient, if there is a possibility that sediment tracked from the site could contribute to the inlets.</p>
Site Clearing and Grubbing	<ul style="list-style-type: none"> Install perimeter controls as needed on downgradient perimeter of site (silt fence, wattles, etc). Limit disturbance to those areas planned for disturbance and protect undisturbed areas within the site (construction fence, flagging, etc). Preserve vegetative buffer at site perimeter. Create stabilized staging area. Locate portable toilets on flat surfaces away from drainage paths. Stake in areas susceptible to high winds. Construct concrete washout area and provide signage. Establish waste disposal areas. Install sediment basins. Create dirt perimeter berms and/or brush barriers during grubbing and clearing. Separate and stockpile topsoil, leave roughened and/or cover. Protect stockpiles with perimeter control BMPs. Stockpiles should be located away from drainage paths and should be accessed from the upgradient side so that perimeter controls can remain in place on the downgradient side. Use erosion control blankets, temporary seeding, and/or mulch for stockpiles that will be inactive for an extended period. Leave disturbed area of site in a roughened condition to limit erosion. Consider temporary revegetation for areas of the site that have been disturbed but that will be inactive for an extended period. Water to minimize dust but not to the point that watering creates runoff.

Project Phase	BMPs
Utility And Infrastructure Installation	<p>In Addition to the Above BMPs:</p> <ul style="list-style-type: none"> ▪ Close trench as soon as possible (generally at the end of the day). ▪ Use rough-cut street control or apply road base for streets that will not be promptly paved. ▪ Provide inlet protection as streets are paved and inlets are constructed. ▪ Protect and repair BMPs, as necessary. ▪ Perform street sweeping as needed.
Building Construction	<p>In Addition to the Above BMPs:</p> <ul style="list-style-type: none"> ▪ Implement materials management and good housekeeping practices for home building activities. ▪ Use perimeter controls for temporary stockpiles from foundation excavations. ▪ For lots adjacent to streets, lot-line perimeter controls may be necessary at the back of curb.
Final Grading	<p>In Addition to the Above BMPs:</p> <ul style="list-style-type: none"> ▪ Remove excess or waste materials. ▪ Remove stored materials.
Final Stabilization	<p>In Addition to the Above BMPs:</p> <ul style="list-style-type: none"> ▪ Seed and mulch/tackify. ▪ Seed and install blankets on steep slopes. ▪ Remove all temporary BMPs when site has reached final stabilization.

Description

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are typically used either as a perimeter control or as part of inlet protection. When placed at angles in the curb line, rock socks are typically referred to as curb socks. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.



Photograph RS-1. Rock socks placed at regular intervals in a curb line can help reduce sediment loading to storm sewer inlets. Rock socks can also be used as perimeter controls.

Appropriate Uses

Rock socks can be used at the perimeter of a disturbed area to control localized sediment loading. A benefit of rock socks as opposed to other perimeter controls is that they do not have to be trenched or staked into the ground; therefore, they are often used on roadway construction projects where paved surfaces are present.

Use rock socks in inlet protection applications when the construction of a roadway is substantially complete and the roadway has been directly connected to a receiving storm system.

Design and Installation

When rock socks are used as perimeter controls, the maximum recommended tributary drainage area per 100 linear feet of rock socks is approximately 0.25 acres with disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1. A rock sock design detail and notes are provided in Detail RS-1. Also see the Inlet Protection Fact Sheet for design and installation guidance when rock socks are used for inlet protection and in the curb line.

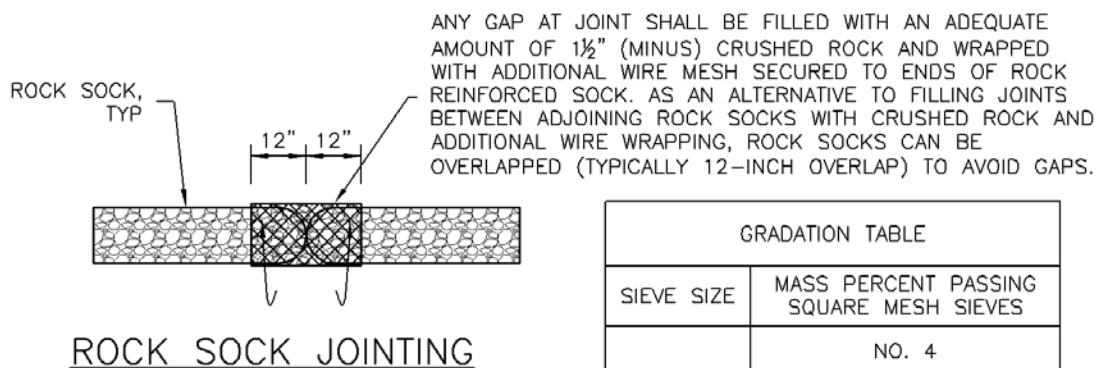
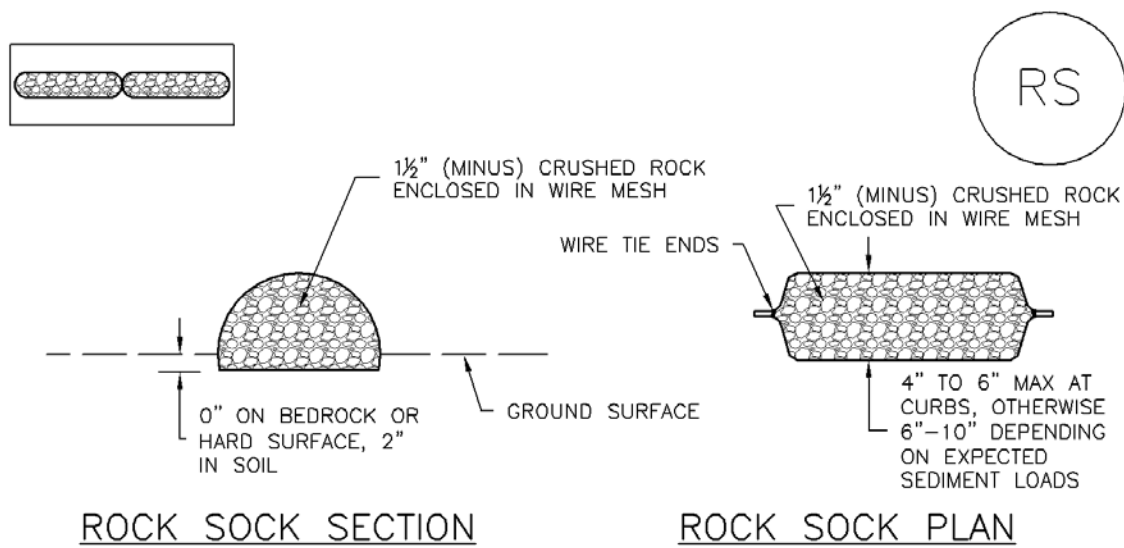
When placed in the gutter adjacent to a curb, rock socks should protrude no more than two feet from the curb in order for traffic to pass safely. If located in a high traffic area, place construction markers to alert drivers and street maintenance workers of their presence.

Maintenance and Removal

Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height.

Once upstream stabilization is complete, rock socks and accumulated sediment should be removed and properly disposed.

Rock Sock	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	No



ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
-LOCATION(S) OF ROCK SOCKS.
2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).
3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½", RECOMMENDED MINIMUM ROLL WIDTH OF 48"
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS-1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY $\frac{1}{2}$ OF THE HEIGHT OF THE ROCK SOCK.
6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER NDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

Description

A sediment control log is a linear roll made of natural materials such as straw, coconut fiber, or other fibrous material trenched into the ground and held with a wooden stake. Sediment control logs are also often referred to as "straw wattles." They are used as a sediment barrier to intercept sheet flow runoff from disturbed areas.



Appropriate Uses

Sediment control logs can be used in the following applications to trap sediment:

- As perimeter control for stockpiles and the site.
- As part of inlet protection designs.
- As check dams in small drainage ditches. (Sediment control logs are not intended for use in channels with high flow velocities.)
- On disturbed slopes to shorten flow lengths (as an erosion control).
- As part of multi-layered perimeter control along a receiving water such as a stream, pond or wetland.



Photographs SCL-1 and SCL-2. Sediment control logs used as 1) a perimeter control around a soil stockpile; and, 2) as a "J-hook" perimeter control at the corner of a construction site.

Sediment control logs work well in combination with other layers of erosion and sediment controls.

Design and Installation

Sediment control logs should be installed along the contour to avoid concentrating flows. The maximum allowable tributary drainage area per 100 lineal feet of sediment control log, installed along the contour, is approximately 0.25 acres with a disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1. Longer and steeper slopes require additional measures. This recommendation only applies to sediment control logs installed along the contour. When installed for other uses, such as perimeter control, it should be installed in a way that will not produce concentrated flows. For example, a "J-hook" installation may be appropriate to force runoff to pond and evaporate or infiltrate in multiple areas rather than concentrate and cause erosive conditions parallel to the BMP.

Sediment Control Log	
Functions	
Erosion Control	Moderate
Sediment Control	Yes
Site/Material Management	No

Although sediment control logs initially allow runoff to flow through the BMP, they can quickly become a barrier and should be installed is if they are impermeable.

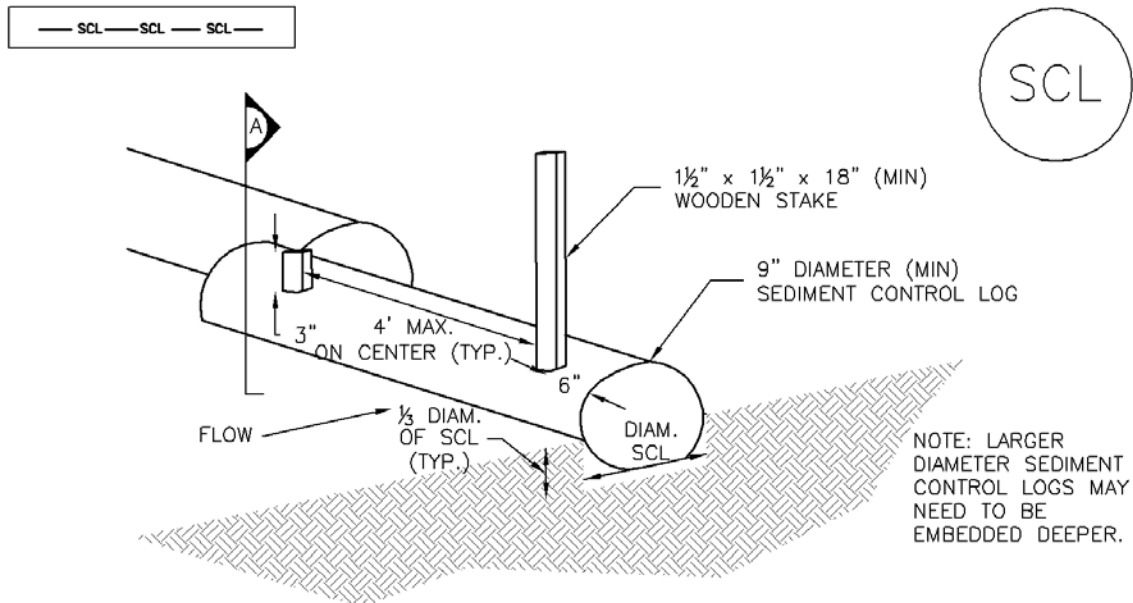
Design details and notes for sediment control logs are provided in Detail SCL-1. Sediment logs must be properly trenched and staked into the ground to prevent undercutting, bypassing and displacement. When installed on slopes, sediment control logs should be installed along the contours (i.e., perpendicular to flow).

Improper installation can lead to poor performance. Be sure that sediment control logs are properly trenched, anchored and tightly jointed.

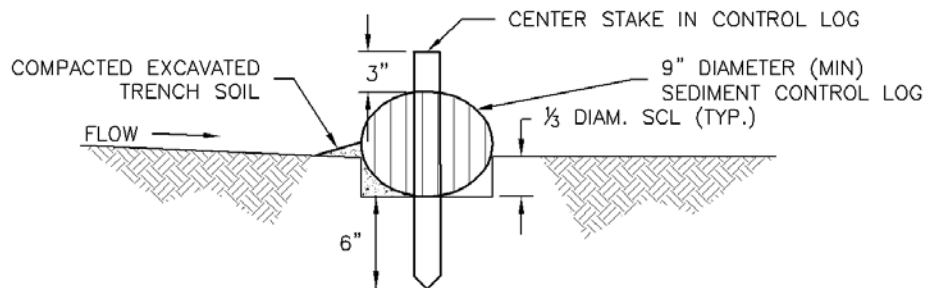
Maintenance and Removal

Be aware that sediment control logs will eventually degrade. Remove accumulated sediment before the depth is one-half the height of the sediment log and repair damage to the sediment log, typically by replacing the damaged section.

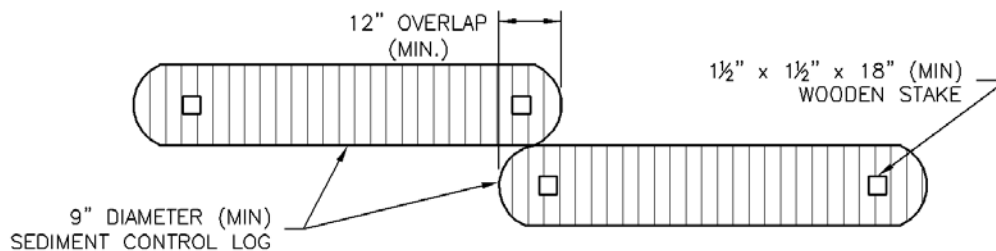
Once the upstream area is stabilized, remove and properly dispose of the logs. Areas disturbed beneath the logs may need to be seeded and mulched. Sediment control logs that are biodegradable may occasionally be left in place (e.g., when logs are used in conjunction with erosion control blankets as permanent slope breaks). However, removal of sediment control logs after final stabilization is typically recommended when used in perimeter control, inlet protection and check dam applications.



SEDIMENT CONTROL LOG

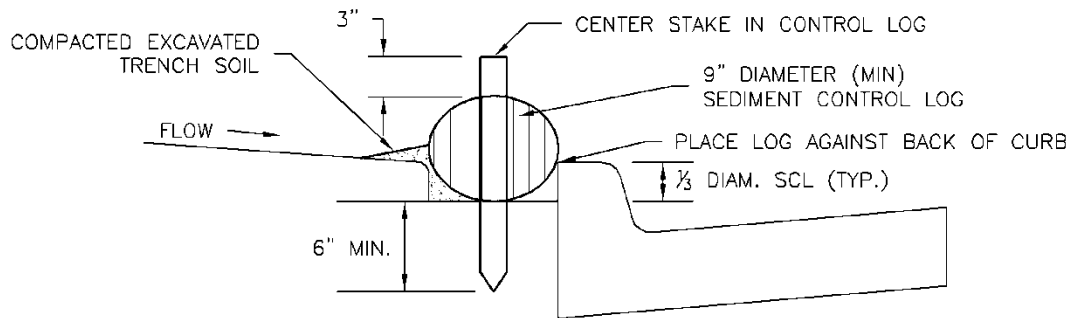


SECTION A

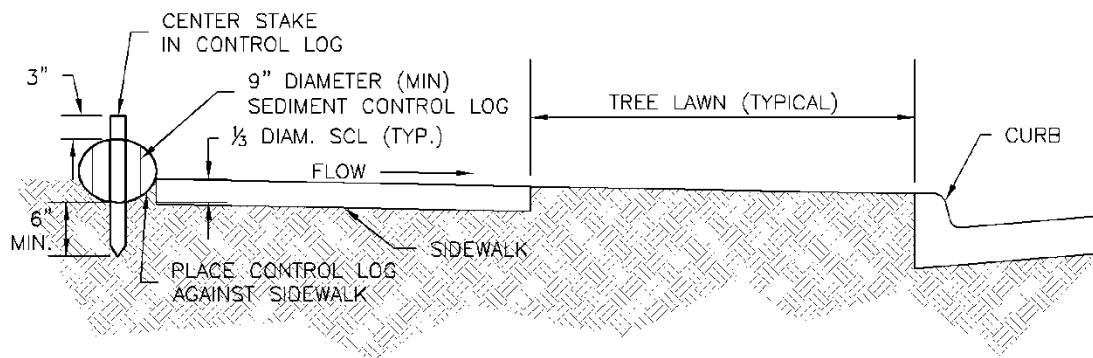


SEDIMENT CONTROL LOG JOINTS

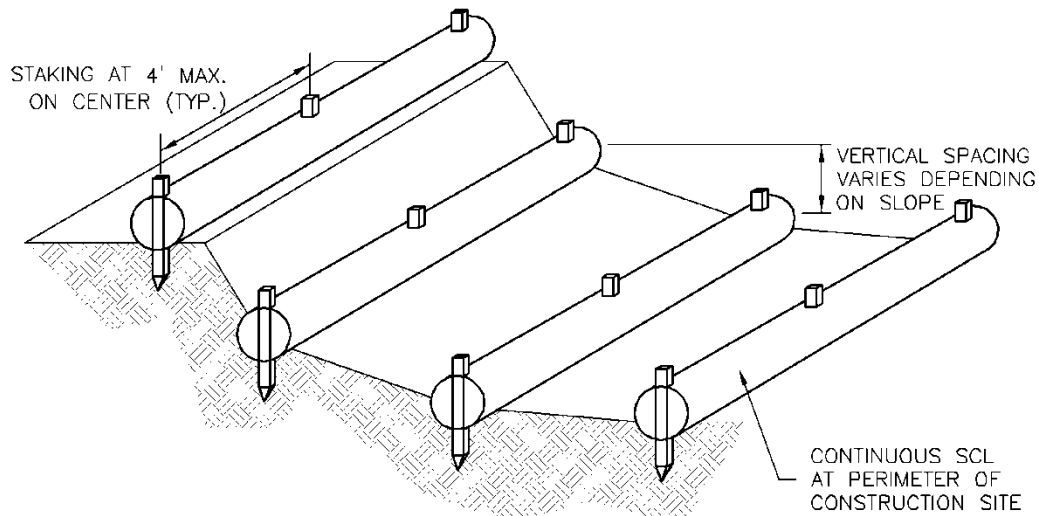
SCL-1. SEDIMENT CONTROL LOG



SCL-2. SEDIMENT CONTROL LOG AT BACK OF CURB



SCL-3. SEDIMENT CONTROL LOG AT SIDEWALK WITH
TREE LAWN



SCL-4. SEDIMENT CONTROL LOGS TO CONTROL
SLOPE LENGTH

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADE LAND-DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY $\frac{1}{2}$ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING
6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY $\frac{1}{2}$ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Description

Surface roughening is an erosion control practice that involves tracking, scarifying, imprinting, or tilling a disturbed area to provide temporary stabilization of disturbed areas. Surface roughening creates variations in the soil surface that help to minimize wind and water erosion. Depending on the technique used, surface roughening may also help establish conditions favorable to establishment of vegetation.



Photograph SR-1. Surface roughening via imprinting for temporary stabilization.

Appropriate Uses

Surface roughening can be used to provide temporary stabilization of disturbed areas, such as when revegetation cannot be immediately established due to seasonal planting limitations. Surface roughening is not a stand-alone BMP, and should be used in conjunction with other erosion and sediment controls.

Surface roughening is often implemented in conjunction with grading and is typically performed using heavy construction equipment to track the surface. Be aware that tracking with heavy equipment will also compact soils, which is not desirable in areas that will be revegetated. Scarifying, tilling, or ripping are better surface roughening techniques in locations where revegetation is planned. Roughening is not effective in very sandy soils and cannot be effectively performed in rocky soil.

Design and Installation

Typical design details for surfacing roughening on steep and mild slopes are provided in Details SR-1 and SR-2, respectively.

Surface roughening should be performed either after final grading or to temporarily stabilize an area during active construction that may be inactive for a short time period. Surface roughening should create depressions 2 to 6 inches deep and approximately 6 inches apart. The surface of exposed soil can be roughened by a number of techniques and equipment. Horizontal grooves (running parallel to the contours of the land) can be made using tracks from equipment treads, stair-step grading, ripping, or tilling.

Fill slopes can be constructed with a roughened surface. Cut slopes that have been smooth graded can be roughened as a subsequent operation. Roughening should follow along the contours of the slope. The tracks left by truck mounted equipment working perpendicular to the contour can leave acceptable horizontal depressions; however, the equipment will also compact the soil.

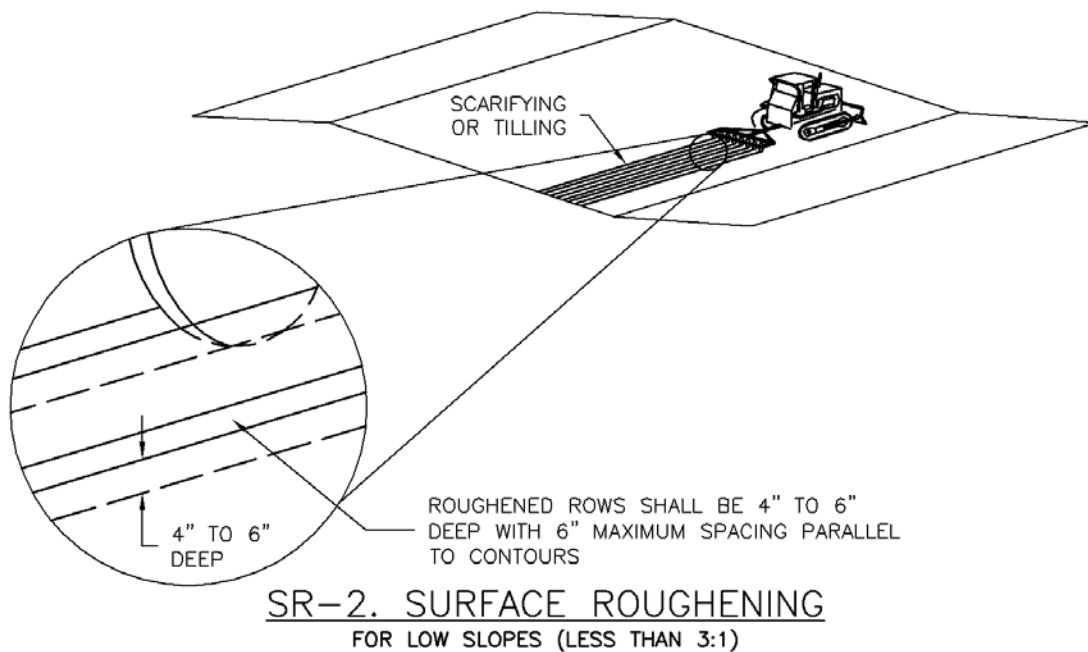
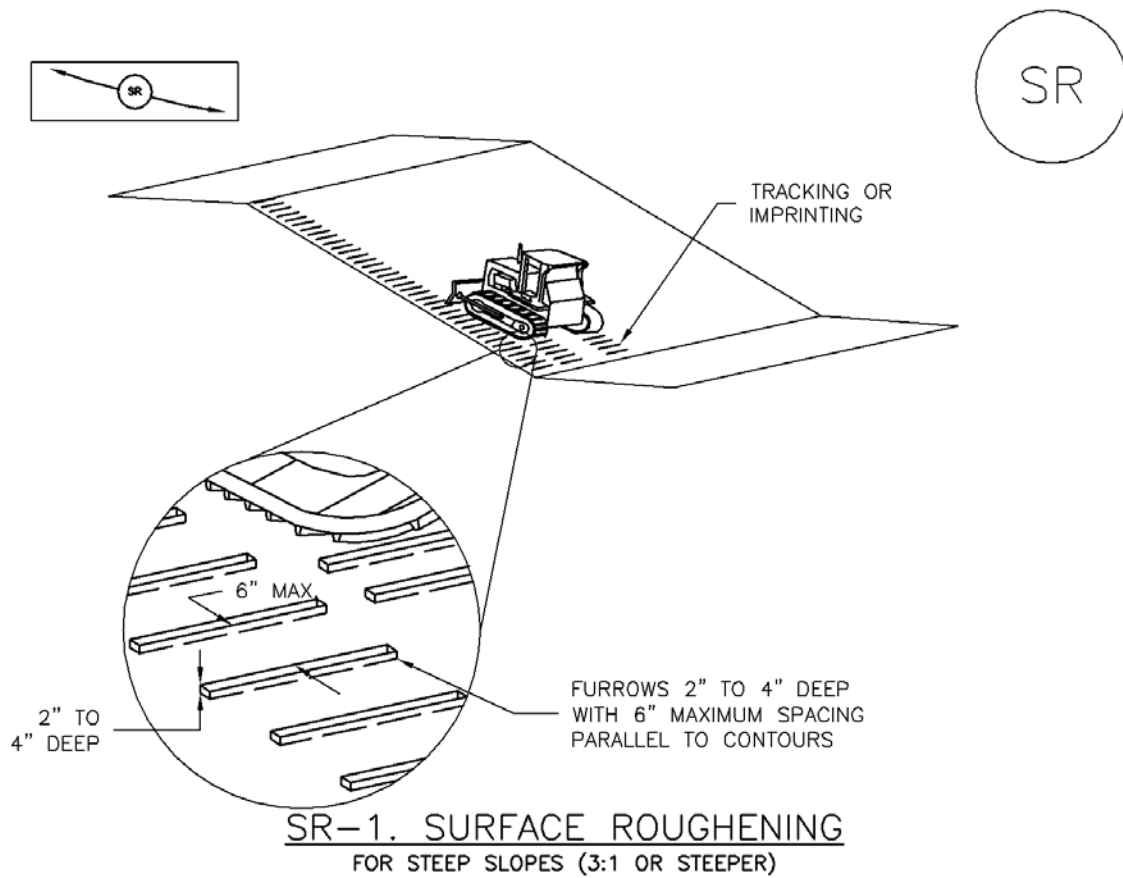
Surface Roughening	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	No

Maintenance and Removal

Care should be taken not to drive vehicles or equipment over areas that have been surface roughened. Tire tracks will smooth the roughened surface and may cause runoff to collect into rills and gullies.

Because surface roughening is only a temporary control, additional treatments may be necessary to maintain the soil surface in a roughened condition.

Areas should be inspected for signs of erosion. Surface roughening is a temporary measure, and will not provide long-term erosion control.



SURFACE ROUGHENING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 –LOCATION(S) OF SURFACE ROUGHENING.
2. SURFACE ROUGHENING SHALL BE PROVIDED PROMPTLY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL PLACEMENT OR ANY FORECASTED RAIN EVENT.
3. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.
4. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.
5. A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.

SURFACE ROUGHENING MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACE UPON DISCOVERY OF THE FAILURE.
4. VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
5. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.
6. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER RILL EROSION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Description

Stockpile management includes measures to minimize erosion and sediment transport from soil stockpiles.

Appropriate Uses

Stockpile management should be used when soils or other erodible materials are stored at the construction site. Special attention should be given to stockpiles in close proximity to natural or manmade storm systems.



Photograph SP-1. A topsoil stockpile that has been partially revegetated and is protected by silt fence perimeter control.

Design and Installation

Locate stockpiles away from all drainage system components including storm sewer inlets. Where practical, choose stockpile locations that that will remain undisturbed for the longest period of time as the phases of construction progress. Place sediment control BMPs around the perimeter of the stockpile, such as sediment control logs, rock socks, silt fence, straw bales and sand bags. See Detail SP-1 for guidance on proper establishment of perimeter controls around a stockpile. For stockpiles in active use, provide a stabilized designated access point on the upgradient side of the stockpile.

Stabilize the stockpile surface with surface roughening, temporary seeding and mulching, erosion control blankets, or soil binders. Soils stockpiled for an extended period (typically for more than 60 days) should be seeded and mulched with a temporary grass cover once the stockpile is placed (typically within 14 days). Use of mulch only or a soil binder is acceptable if the stockpile will be in place for a more limited time period (typically 30-60 days). Timeframes for stabilization of stockpiles noted in this fact sheet are "typical" guidelines. Check permit requirements for specific federal, state, and/or local requirements that may be more prescriptive.

Stockpiles should not be placed in streets or paved areas unless no other practical alternative exists. See the Stabilized Staging Area Fact Sheet for guidance when staging in roadways is unavoidable due to space or right-of-way constraints. For paved areas, rock socks must be used for perimeter control and all inlets with the potential to receive sediment from the stockpile (even from vehicle tracking) must be protected.

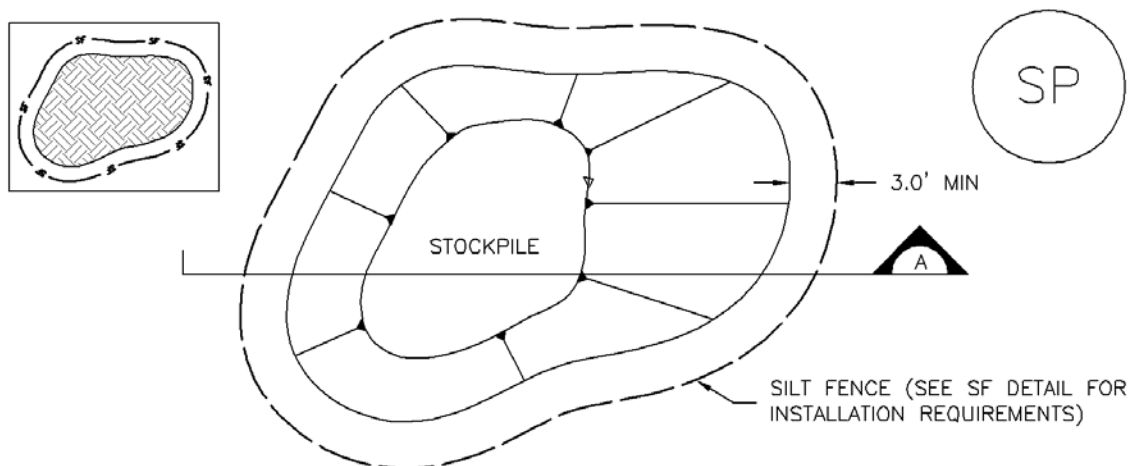
Maintenance and Removal

Inspect perimeter controls and inlet protection in accordance with their respective BMP Fact Sheets. Where seeding, mulch and/or soil binders are used, reseeding or reapplication of soil binder may be necessary.

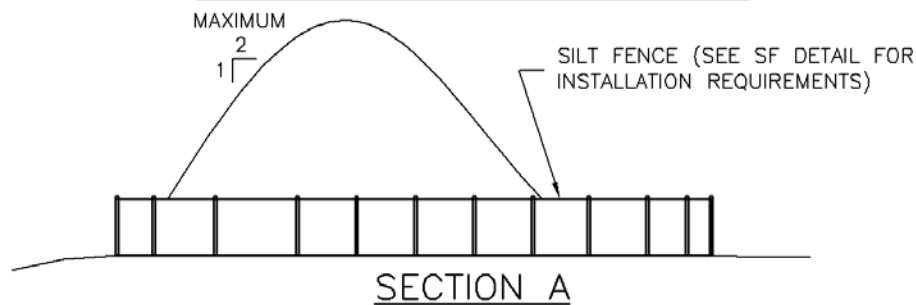
When temporary removal of a perimeter BMP is necessary to access a stockpile, ensure BMPs are reinstalled in accordance with their respective design detail section.

Stockpile Management	
Functions	
Erosion Control	Yes
Sediment Control	Yes
Site/Material Management	Yes

When the stockpile is no longer needed, properly dispose of excess materials and revegetate or otherwise stabilize the ground surface where the stockpile was located.



STOCKPILE PROTECTION PLAN



SECTION A

SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 -LOCATION OF STOCKPILES.
 -TYPE OF STOCKPILE PROTECTION.
2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

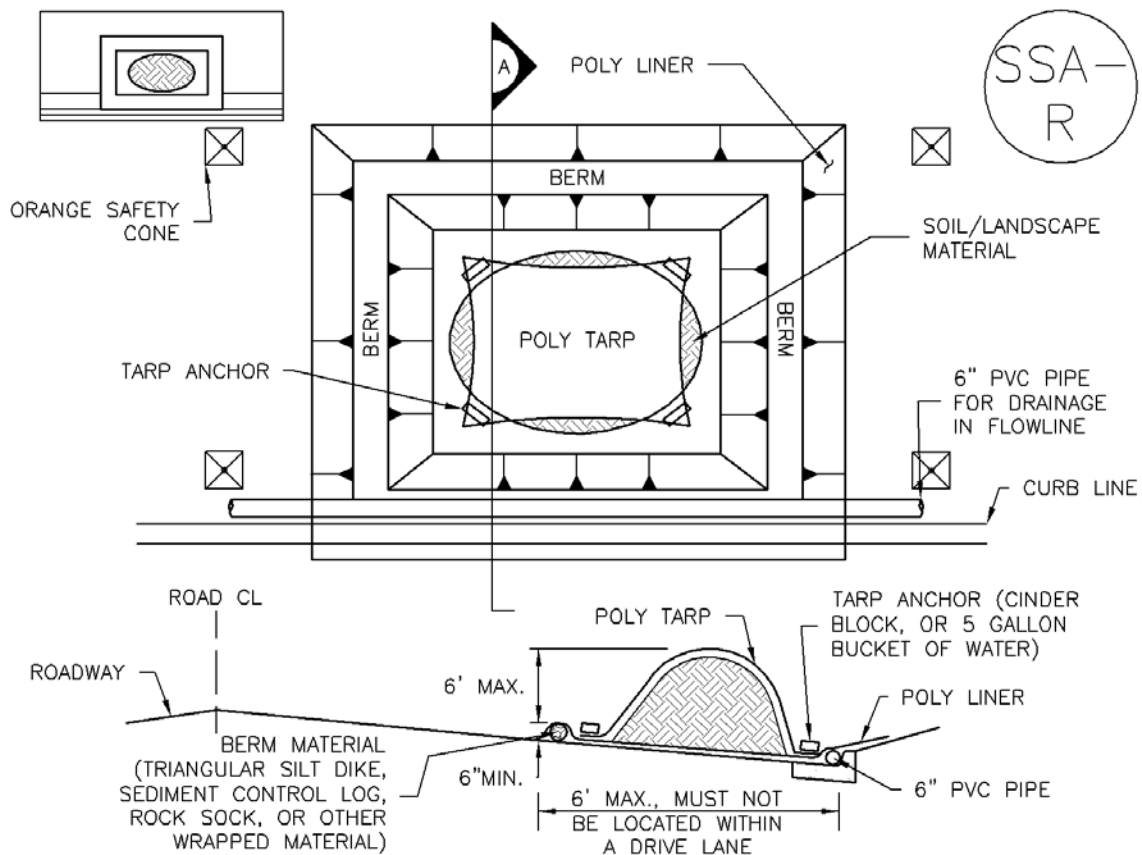
STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SP-2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
 - LOCATION OF MATERIAL STAGING AREA(S).
 - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.
3. MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.
4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.
5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.
6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.
7. THIS FEATURE CAN BE USED FOR:
 - UTILITY REPAIRS.
 - WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
 - OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

Description

Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.

Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.



Photograph SS-1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes

Description

Vehicle tracking controls provide stabilized construction site access where vehicles exit the site onto paved public roads. An effective vehicle tracking control helps remove sediment (mud or dirt) from vehicles, reducing tracking onto the paved surface.

Appropriate Uses

Implement a stabilized construction entrance or vehicle tracking control where frequent heavy vehicle traffic exits the construction site onto a paved roadway. An effective vehicle tracking control is particularly important during the following conditions:

- Wet weather periods when mud is easily tracked off site.
- During dry weather periods where dust is a concern.
- When poorly drained, clayey soils are present on site.

Although wheel washes are not required in designs of vehicle tracking controls, they may be needed at particularly muddy sites.

Design and Installation

Construct the vehicle tracking control on a level surface. Where feasible, grade the tracking control towards the construction site to reduce off-site runoff. Place signage, as needed, to direct construction vehicles to the designated exit through the vehicle tracking control. There are several different types of stabilized construction entrances including:

VTC-1. Aggregate Vehicle Tracking Control. This is a coarse-aggregate surfaced pad underlain by a geotextile. This is the most common vehicle tracking control, and when properly maintained can be effective at removing sediment from vehicle tires.

VTC-2. Vehicle Tracking Control with Construction Mat or Turf Reinforcement Mat. This type of control may be appropriate for site access at very small construction sites with low traffic volume over vegetated areas. Although this application does not typically remove sediment from vehicles, it helps protect existing vegetation and provides a stabilized entrance.



Photograph VTC-1. A vehicle tracking control pad constructed with properly sized rock reduces off-site sediment tracking.

Vehicle Tracking Control	
Functions	
Erosion Control	Moderate
Sediment Control	Yes
Site/Material Management	Yes

VTC-3. Stabilized Construction Entrance/Exit with Wheel Wash. This is an aggregate pad, similar to VTC-1, but includes equipment for tire washing. The wheel wash equipment may be as simple as hand-held power washing equipment to more advance proprietary systems. When a wheel wash is provided, it is important to direct wash water to a sediment trap prior to discharge from the site.

Vehicle tracking controls are sometimes installed in combination with a sediment trap to treat runoff.

Maintenance and Removal

Inspect the area for degradation and replace aggregate or material used for a stabilized entrance/exit as needed. If the area becomes clogged and ponds water, remove and dispose of excess sediment or replace material with a fresh layer of aggregate as necessary.

With aggregate vehicle tracking controls, ensure rock and debris from this area do not enter the public right-of-way.

Remove sediment that is tracked onto the public right of way daily or more frequently as needed. Excess sediment in the roadway indicates that the stabilized construction entrance needs maintenance.

Ensure that drainage ditches at the entrance/exit area remain clear.

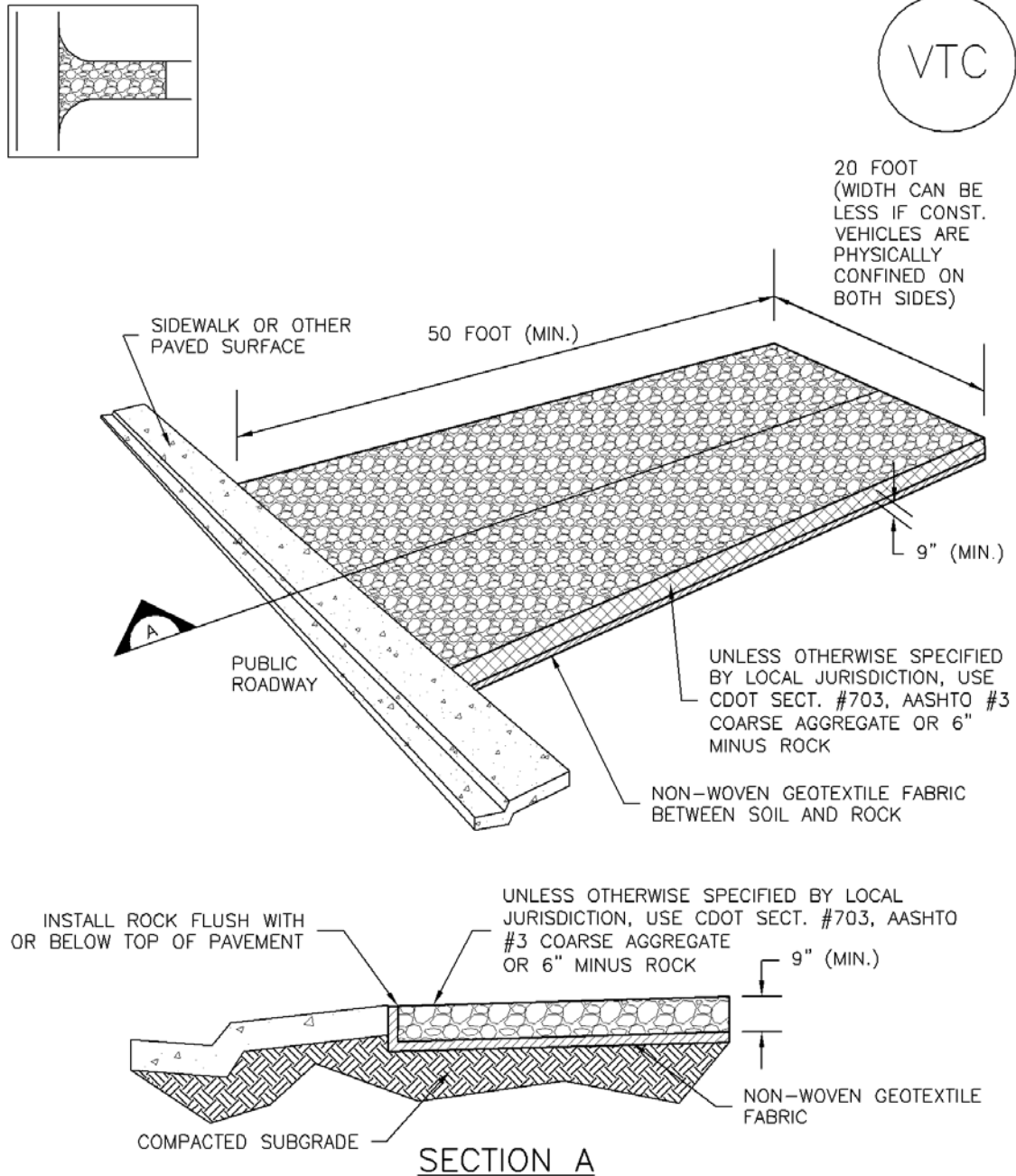
A stabilized entrance should be removed only when there is no longer the potential for vehicle tracking to occur. This is typically after the site has been stabilized.

When wheel wash equipment is used, be sure that the wash water is discharged to a sediment trap prior to discharge. Also inspect channels conveying the water from the wash area to the sediment trap and stabilize areas that may be eroding.

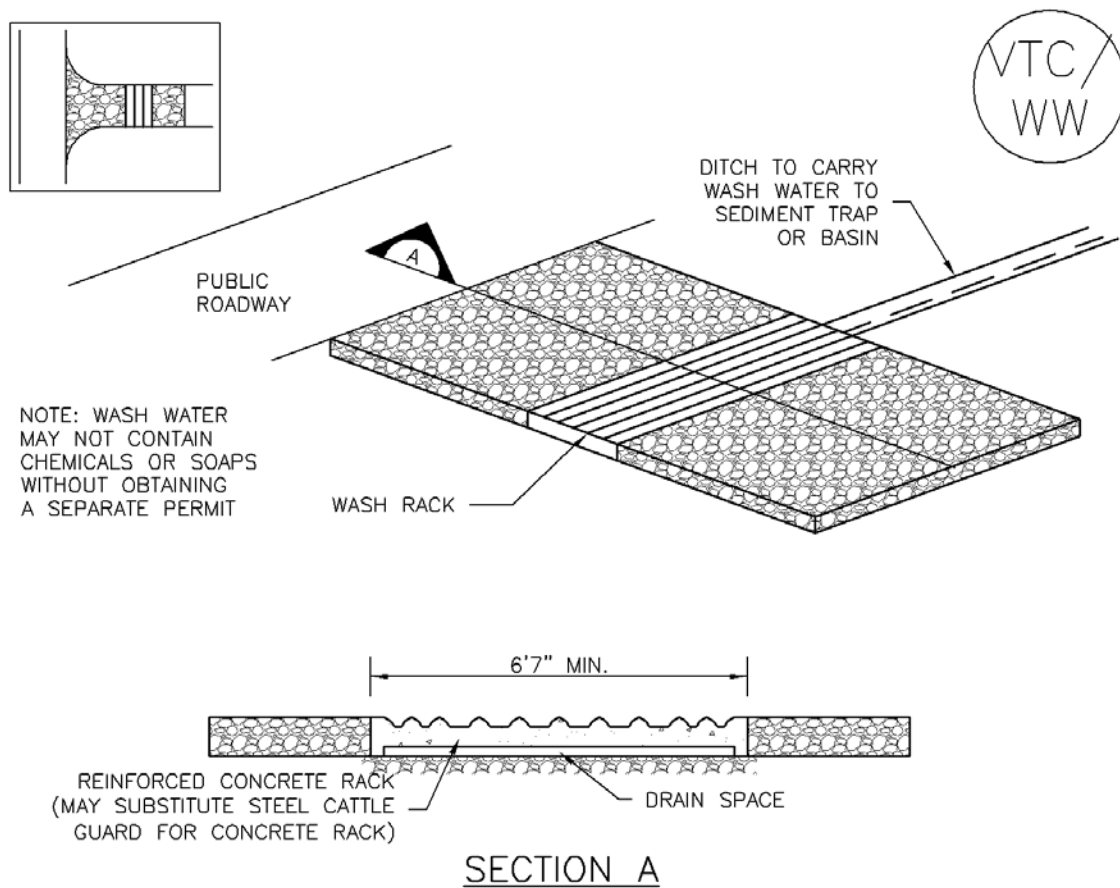
When a construction entrance/exit is removed, excess sediment from the aggregate should be removed and disposed of appropriately. The entrance should be promptly stabilized with a permanent surface following removal, typically by paving.



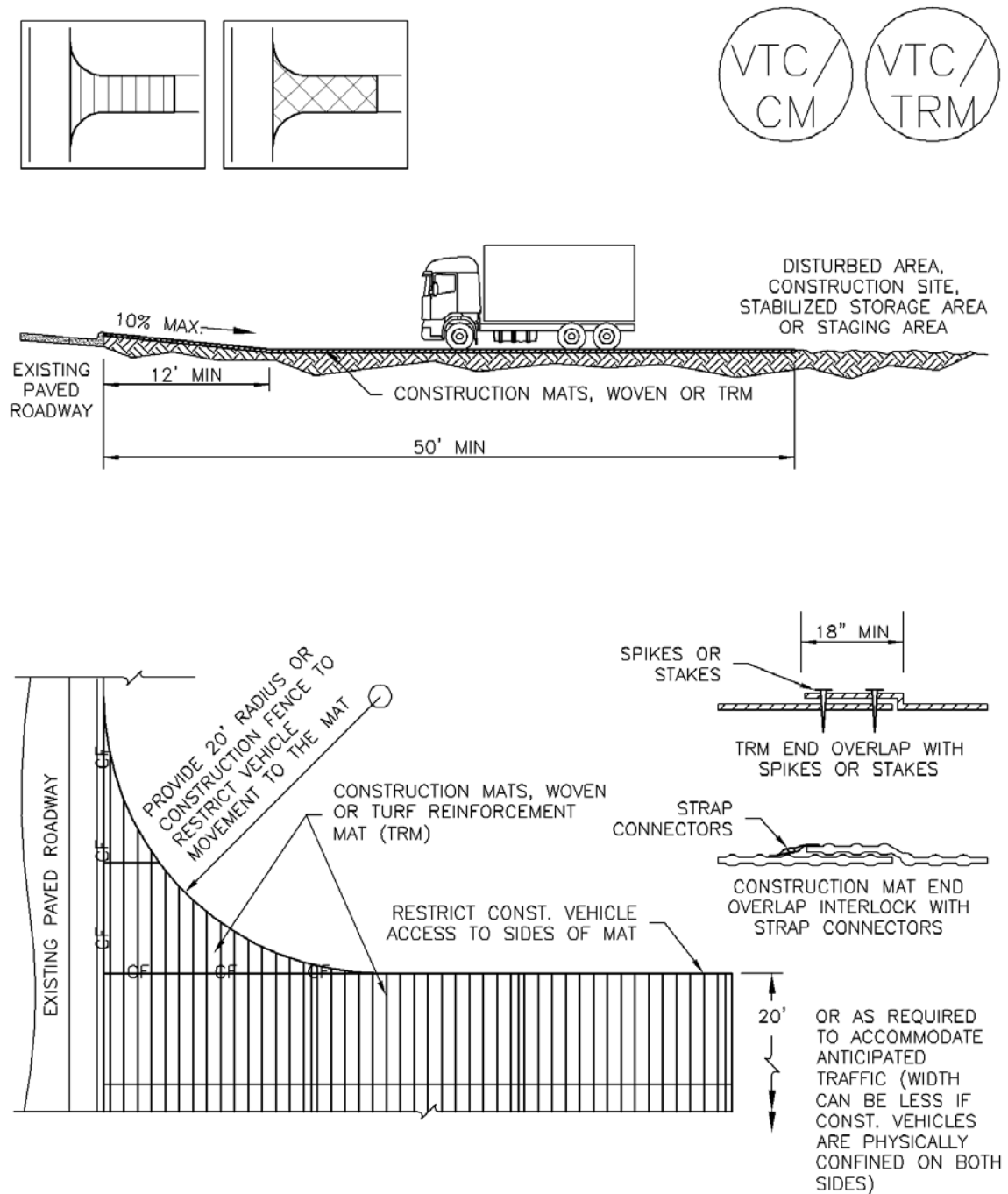
Photograph VTC-2. A vehicle tracking control pad with wheel wash facility. Photo courtesy of Tom Gore.



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK



VTC-3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
 - LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
 - TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

APPENDIX 6: Erosion Control Plan (EC Plan) – Site Map

EC Plan includes, at a minimum, the following:

1. Construction site boundaries;
2. Flow arrows that depict stormwater flow directions on-site and runoff direction;
3. Areas of ground disturbance including areas of borrow and fill;
4. Areas used for storage of soil;
5. Location of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt;
6. Location of dedicated asphalt, concrete batch plants and masonry mixing stations;
7. Location of all structural control measures;
8. Location of all non-structural control measures;
9. Location of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 ft of a receiving water; and
10. Location of all stream crossings located within the construction site boundary.

Urban Poster:



Rural Poster: <http://www.adcogov.org/sites/default/files/Stormwater%20Rural%20-%20Small%20Builder.pdf>

REMORA CONNECTION PIPELINE

ADAMS COUNTY, COLORADO

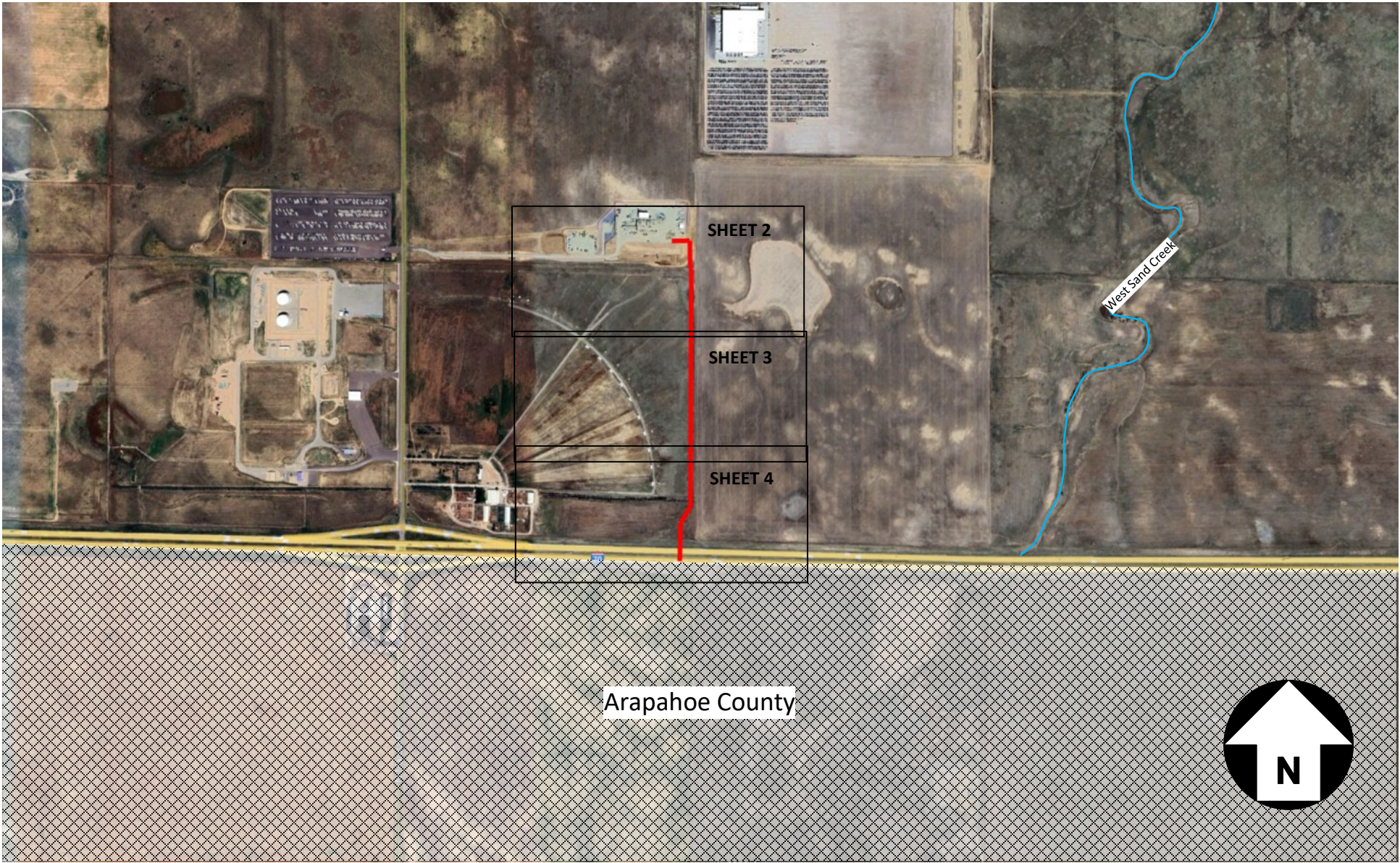
SENW ¼, NESW ¼, SESW ¼, SECTION 36, T3S R64W

Adams County Erosion Control Plan - General Notes:


1. All construction projects, regardless of the size, shall install, maintain and repair stormwater pollution **control measures (CMs)** to effectively minimize erosion, sediment transport, and the release of pollutants related to construction activity. CMs example include sediment control logs (SCL), silt fence (SF), dikes/swales, sediment traps (ST), inlet protection (IP), outlet protection (OP), check dams (CD), sediment basins (SB), temporary/permanent seeding and mulching (MU), soil roughening, maintaining existing vegetation and protection of trees. CMs must be selected, designed, adequately sized, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. CMs/BMPs installation and maintenance details shall conform to Mile High Flood District’s Urban Drainage Flood Control Criteria Manual Volume 3, or the Colorado Department of Transportation (CDOT) Standards & Specifications (Green Book). CMs must filter, settle, contain or strain pollutants from stormwater flows in order to prevent bypass of flows without treatment. CMs must be appropriate to treat the runoff from the amount of disturbed area, the expected flow rate, duration, and flow conditions (i.e., sheet or concentrated flow). CMs/BMPs **shall be specified in the SWMP (if applicable), and the locations shown on the EC Plan.**
2. Prior to construction, projects disturbing 1 or more acres of land, or any project belonging to a common plan of development disturb 1 or more acres, must obtain:
 - A General **Permit** for Stormwater Discharges associated with Construction Activities, from the Colorado Department of Public Health and Environment, and
 - An Adams County Stormwater Quality Permit within the unincorporated Adams County MS4 Area.
3. Permitted projects shall develop a Stormwater Management Plan (**SWMP**), aka Erosion and Sediment Control Plan (ESCP), in compliance with CDPHE minimum requirements. The approved SWMP, including Erosion Control (EC) Plan (Site Map), shall be **kept** on site and **always updated**. The **Qualified Stormwater Manager** is responsible for implementing the SWMP and CMs (aka BMPs) during construction.
4. Permitted projects shall perform regular **Stormwater Inspections** every 7 calendar days; **or** every 14 calendar days and within 24 hours after any precipitation or snowmelt event that causes surface erosion. Inspection frequency can be reduced for **Post-Storm Event inspections at Temporarily Idle Sites** and for **Stormwater Inspections at Completed Sites waiting for final stabilization**. Inspection reports must identify any incidents of non-compliance.
5. **Tracking** of dirt onto paved public or private paved roads is not allowed. The use of dirt ramps to enter/exit from an unpaved into a paved area is prohibited. Vehicle tracking controls shall be implemented, otherwise entrance area must drain thru a CM towards the private site.
6. **Truckloads** of fill material imported to or cut material exported from the site shall be properly covered to prevent loss of the material during transportation on public ROW. Haul routes must be permitted by the County. No material shall be transported to another site without applicable permits.
7. Control measures designed for **concrete washout waste** must be implemented. This includes washout waste discharged to the ground and washout waste from concrete trucks and masonry operations.
8. Temporary **CMs/BMPs shall be removed** after the site has reached final stabilization.
9. **Dewatering operations** discharging off-site into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, require a State Construction Dewatering Permit.
10. Permitted projects shall **keep** the CDPHE’s Stormwater Discharge Permit, Stormwater Management Plan (SWMP) and inspection logs available on-site throughout the duration of the project, and for an additional 3 years after permit close-out.
11. Permitted landowner and/or contractor shall **close** the State and City/County permit once **final stabilization** is reached. Stormwater inspections shall continue until Inactivation Notice is filed with CDPHE.

Maintenance Standard Notes:

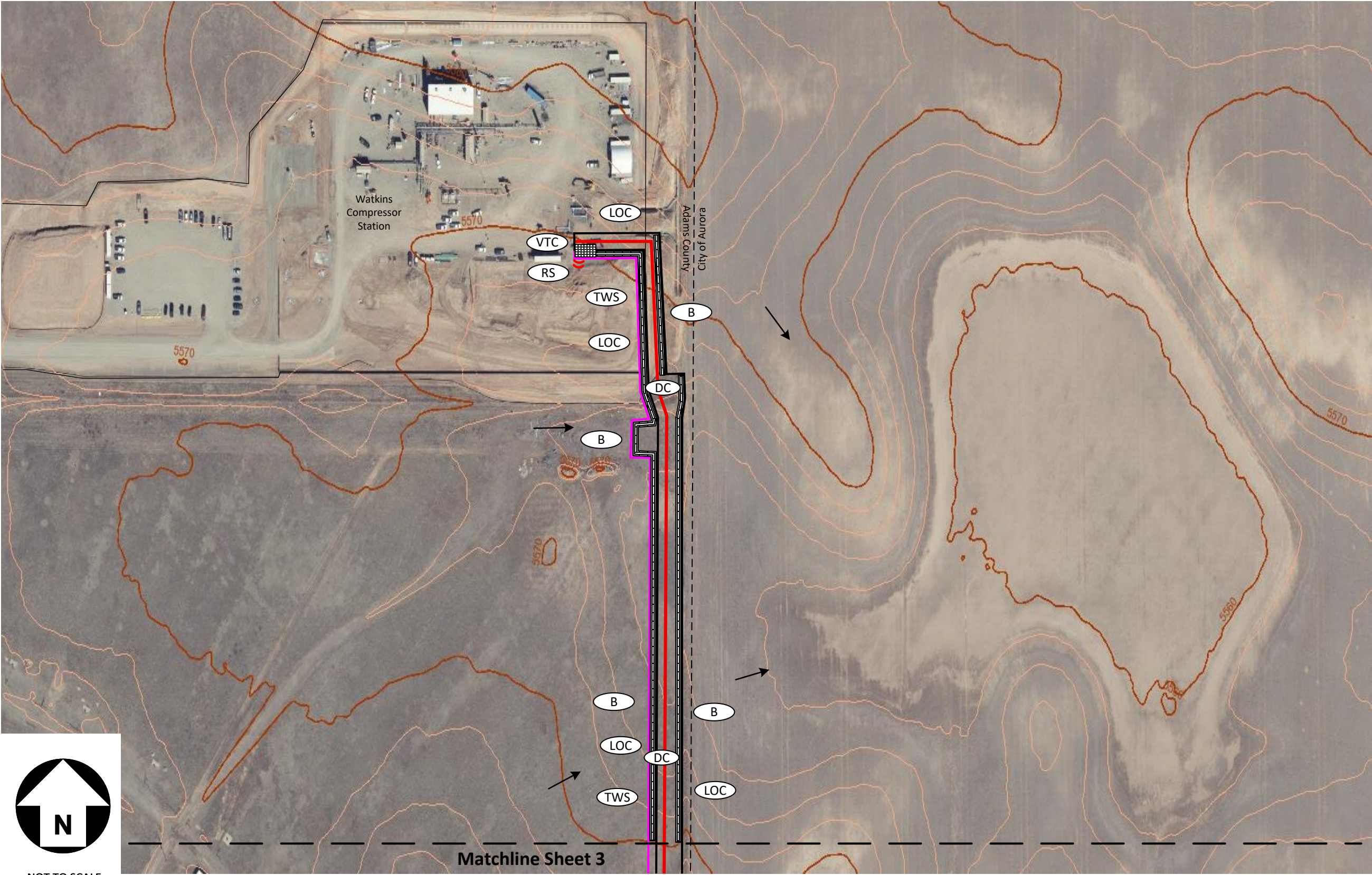
1. Maintain and repair CMs according to approved Erosion Control Plan (civil drawing) to assure they continue performing as originally intended.
2. CMs/BMPs requiring maintenance or adjustment shall be **repaired immediately** after observation of the failing BMP.
3. CMs shall be cleaned when sediment levels accumulate to **half the design** unless otherwise specified.
4. SWMP and EC plan shall be continuously **updated** to reflect new or revised CMs/BMPs due to changes in design, construction, operation, or maintenance, to accurately reflect the actual field conditions. A notation shall be made in the SWMP, including date of changes in the field, identification of the CMs removed, modified or added, and the locations of those CMs. Updates must be made within 72-hours following the change.
5. Maintain **Vehicle Tracking Control (VTC)**, if sediment tracking occurs, clean-up immediately. Sweep by hand or the use street sweepers (with vacuum system). Flushing off paved surfaces with water is prohibited.
6. **CWA** must be cleaned once waste accumulation reaches ¾ of the wet storage capacity of the structure. Legally disposed of concrete waste. Do not bury on-site.
7. **Clean-up spills** immediately after discovery or contain until appropriate cleanup methods can be employed. Follow Manufacturer’s recommended methods for spill cleanup, along with proper disposal methods. **Records** of spills, leaks, or overflows that result in discharge of pollutants must be documented and maintained.
8. Remove sediment from storm sewer infrastructure (ponds, storm pipes, outlets, inlets, roadside ditches, etc.), and restore volume capacity upon completion of project or prior to initial acceptance of public improvements (if applicable). Do not flush sediment offsite, capture on-site and disposed of at an approved location.



SHEET INDEX
COVER: Overview and SWMP notes
SHEET 2: Northwest End Point
SHEET 3: Mid-Point Segment
SHEET 4: I-70 Bore & Adams County End Point

				 <div>7343 S Alton Way, Suite 100 Centennial, CO 80112</div>	Williams Front Range, LLC 4980 State Hwy 374 Green River, WY 82935		Remora Connection Pipeline		Cover	
							Permit # COR401222			
NO.	REVISIONS	BY	DATE							

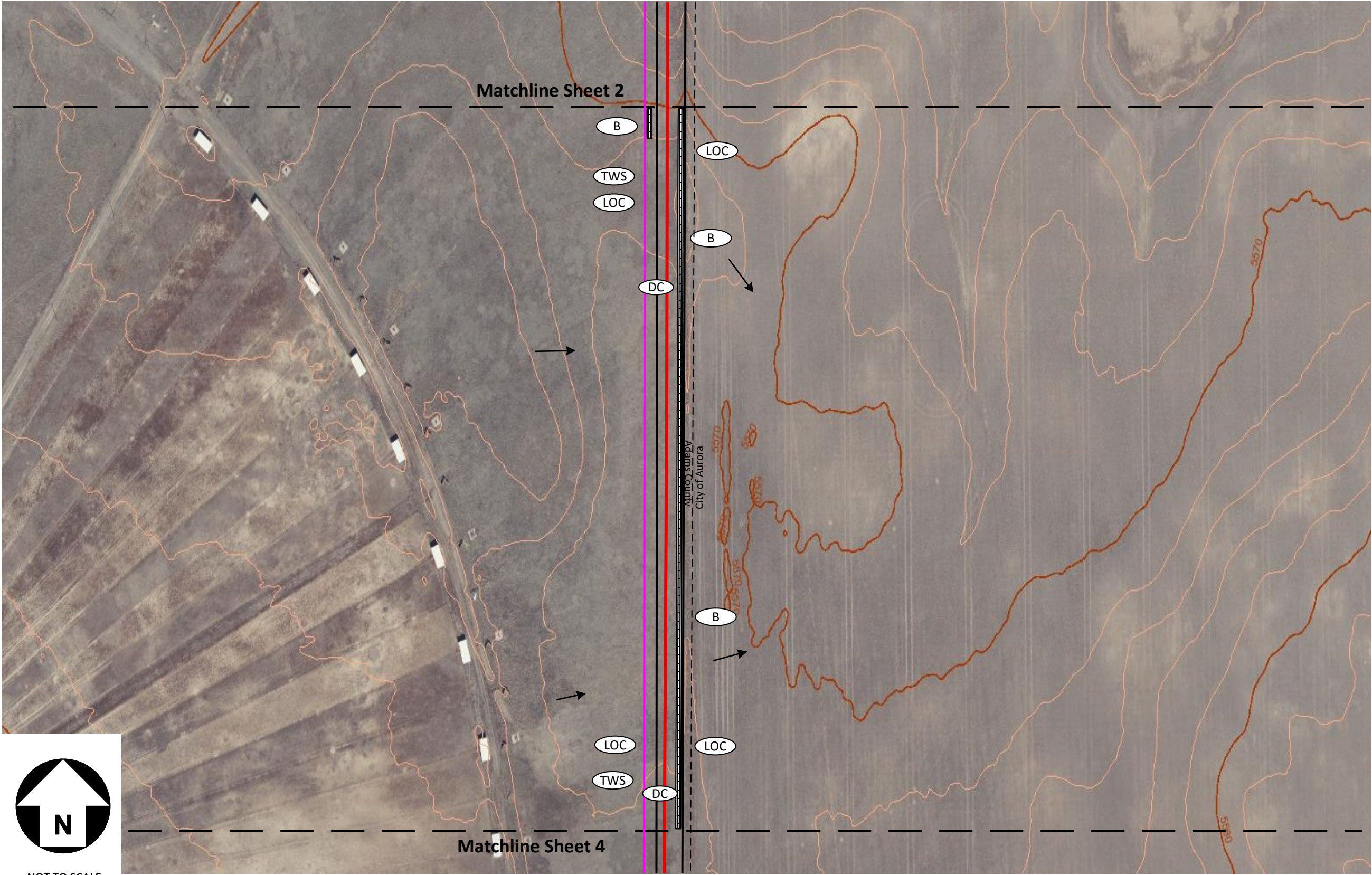
Remora Connection Pipeline
Sheet 2, Northwest End Point



Control Measure Legend:		
	Limits of Construction	(LOC)
	Proposed 10" Gas Line	
	Silt Fence	(SF)
	Rock or Rubber Wattle	(RW)
	Earth Berm	(B)
	Sediment Control Logs	(SCL)
	Inlet Protection	(IP)
	Surface Roughening	(SR)
	Mud Mat Access Point	(MMA)
	Rock Pad Access Point	(VTC)
	Port-O-Let	(PT)
	Sweeping	(SS)
	Flow Direction	
	Stockpile(s)	
	Staging Area/ Storage	(SSA)
	Bore Pit	(BP)
	Rock Socks	(RS)
	Excavation/ Removal Pit	
	Temporary Workspace	(TWS)
	Dust Control	(DC)

- Notes:
1. Limits of construction, project boundaries, right of way, pipeline location, control measure size and location are estimated. Map is not to scale.
 2. Control measures shall be installed downgradient of project as indicated in the plan prior to the start of surface disturbance.
 3. Staging for linear projects typically occurs on the right of way and follows construction activities. If other locations are used they shall be marked on the plan by the SWMP Administrator or Project Manager.
 4. The permittee shall segregate top soil when possible for later use in project reclamation.
 5. Areas of this project presently used for agriculture shall be returned to the landowner on completion of the project. All other areas shall be seeded and mulched or stabilized with road base/ gravel.
 6. Surface roughening shall be used as an interim control measure when possible.
 7. Maintain a 50 foot or greater buffer near any waterway unless infeasible.
 8. Preserve natural vegetation whenever possible.
 8. No stream crossings are anticipated for this project.

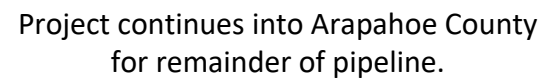
Remora Connection Pipeline
Sheet 3, Mid-Point Segment




Control Measure Legend:		
	Limits of Construction	(LOC)
	Proposed 10" Gas Line	
	Silt Fence	(SF)
	Rock or Rubber Wattle	(RW)
	Earth Berm	(B)
	Sediment Control Logs	(SCL)
	Inlet Protection	(IP)
	Surface Roughening	(SR)
	Mud Mat Access Point	(MMA)
	Rock Pad Access Point	(VTC)
	Port-O-Let	(PT)
	Sweeping	(SS)
	Flow Direction	
	Stockpile(s)	
	Staging Area/ Storage	(SSA)
	Bore Pit	(BP)
	Rock Socks	(RS)
	Excavation/ Removal Pit	
	Temporary Workspace	(TWS)
	Dust Control	(DC)

- Notes:
1. Limits of construction, project boundaries, right of way, pipeline location, control measure size and location are estimated. Map is not to scale.
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 6. Surface roughening shall be used as an interim control measure when possible.
 7. Maintain a 50 foot or greater buffer near any waterway unless infeasible.
 8. Preserve natural vegetation whenever possible.
 8. No stream crossings are anticipated for this project.

Sheet 4, I-70 Bore & Adams County End Point



- Notes:
1. Limits of construction, project boundaries, right of way, pipeline location, control measure size and location are estimated. Map is not to scale.
2. Control measures shall be installed downgradient of project as indicated in the plan prior to the start of surface disturbance.
3. Staging for linear projects typically occurs on the right of way and follows construction activities. If other locations are used they shall be marked on the plan by the SWMP Administrator or Project Manager.
4. The permittee shall segregate top soil when possible for later use in project reclamation.
5. Areas of this project presently used for agriculture shall be returned to the landowner on completion of the project. All other areas shall be seeded and mulched or stabilized with road base/ gravel.
6. Surface roughening shall be used as an interim control measure when possible.
7. Maintain a 50 foot or greater buffer near any waterway unless infeasible.
8. Preserve natural vegetation whenever possible.
8. No stream crossings are anticipated for this project.

				 <div>7343 S Alton Way, Suite 100 Centennial, CO 80112</div>	Williams Front Range, LLC 4980 State Hwy 374 Green River, WY 82935		Remora Connection Pipeline		Sheet 4
							Permit # COR401222		
NO.	REVISIONS	BY	DATE						

APPENDIX 7: Stormwater Inspection Form (Template)

Instructions:

This inspection report has been developed to complete the 7 day (or 14 day and storm event site inspections) and 30-day inspections at completed sites.

Using the Inspection Report:

You can complete the items in the upper section that will remain constant, such as the date, project name, and inspector. You will either need to print out multiple copies of this inspection report or save an electronic version as a master form to use during your inspections.

Ensure that all items are completed by checking “Yes”, “No”, or “N/A” –Not Applicable. Document any “Corrective Action Needed”. Under “BMP/CMs Description”, document the CMs that are required per plan and/or installed, if maintenance is needed and document any “Corrective Action Needed” as necessary.

When issues are present at a construction site, ensure you enter the date when the issue has been addressed, on the same inspection form. Document when the issue was addressed by filling in the “Date Fixed”.

Stormwater Inspection Form

Project Name: Insert Project Name		Inspection Date/Time: Date/Time
Project Location: Insert Project Location		Current Weather: temperature / rainy, sunny, etc
Company Name: Insert Company Name		Current Disturbed Acres: Estimate acreage
Qualified SW Manager Name & Title: Insert Name & Title Here		Current Construction Phase: Initial (Demo, Grading, Utilities, Road), Interim (Building Filing/Block/Lot), Final (Landscape, etc)
Phone Number: Insert Phone Number		
Type of Inspection		
<input type="checkbox"/> 14-Day Inspection <input type="checkbox"/> Post-Storm Event Inspection	<input type="checkbox"/> 7-Day Inspection	<input type="checkbox"/> 30-Day Reduced Frequency Inspection (Construction and Final Stabilization completed + SWMP updated)
<input type="checkbox"/> Winter Conditions Inspections Exclusion: Dates when snow cover existed Dates when construction activities ceased Dates melting conditions began		Deviation from minimum inspection frequency: Y/N If Yes, Explain:
Off-Site Discharge Assessment		
Have pollutants been discharge off-site?	Y/N	If Yes: Insert Location, type of pollutant, date and corrective action.
Minimum Requirements:		
Are there any new potential sources of pollutants?: Y/N		
Does stormwater runoff from <u>all</u> disturbed areas flow thru at least one control measure? Y/N		
Is VTC installed? Y/N (If NOT, area must run thru at least one control measure)		
Is pre-existing vegetation (or equivalent CM) maintained for areas within 50 ft of receiving waters? Y/N/NA		
Does all bulk storage (55+ gall) of petroleum products and liquid chemicals have secondary containment (or equivalent) Y/N/NA		
Is outlet installed to withdrawn water just below surface level at basin? Y/N/NA		
Are inactive disturbed areas stabilized within 14 days? Y/N (if NOT, then document constraints, alternative schedule and location in SWMP)		
Are natural areas (streams, wetlands, trees) protected? Y/N		
Has soil compaction been minimized? Y/N		
Has topsoil been preserved? Y/N		
Has the amount of soil exposed been minimized (including the disturbance of steep slopes)? Y/N		
Is construction perimeter contained? Y/N		
Are designated haul routes in compliance? Y/N		
Are washout facilities identified and maintained? Y/N (Add liner if shallow groundwater or close to stream/channels/wetland)		
Are potential stormwater pollutants stored properly? Y/N		
Are equipment maintenance areas free of spills/leaks? Y/N		
Are non-stormwater discharges properly controlled? (on-site dewatering, CWA, potable water, etc) Y/N		
Has the SWMP/EC Plan (site map) been updated to reflect current field conditions?: Y/N/NA		
Notes: If "YES" describe discharge or potential for discharge below. Document related maintenance, inadequate CMs and corrective actions.		

BMP/Control Measure (CM) Description	Code	In EC plan? Y/N	Installed? Y/N	Describe Corrective Action: Additional BMP Maintenance Removal	Location:	Date Fixed
Sediment Control BMPs/CMs						
Silt Fence	SF					
Sediment Control Log	SCL					
Straw Bale Barrier	SBB					
Rock Sock	RS					
Inlet Protection	IP					
Sediment Basin	SB					
Sediment Trap	ST					
Vegetated Buffer	VB					
Other:						
Erosion Control BMPs/CMs						
Surface Roughening	SR					
Temp. & Permanent Seed	TS/PS					
Soil Binders	SB					
Mulching	MU					
Rolled Erosion Control Prod.	RECP					
Temp. Slope Drain	TSD					
Temp. Outlet Protection	TOP					
Earth Dikes/Drainage Swales	ED/DS					
Terracing	TER					
Check Dams	CD					
Streambank Stabilization	SS					
Dust Control	DC					
Other:						
Materials Management						
Concrete Washout Area	CWA					
Stockpile Management	SP					
Stabilize Staging Area	SSA					
Good Housekeeping	GH					
Portable Toilets	PT					
Blowing Trash	Waste					
Spills and Leaks	Spills					
Equip. Maint. & Fueling	Equip					
Other:						
Site Management Controls						
Protection of Vegetation	PV					
Construction Fence	CF					
Vehicle Tracking Control	VTC					
Stabilized Construction Rd	SCR					
Street Sweeping	SS					
Temp. Diversion Channel	TDC					
Dewatering Ops.	DW					
Temp. Stream Crossing	TSC					
Paving & Grinding Ops.	PGO					
Other:						
Certification Statement (if all CMs are in Good Condition, or After Corrective Actions are Completed): I verify that, to the best of my knowledge and belief, all corrective action and maintenance identified in the inspection are complete, and the site is in compliance w/ permit.						
Signature: Insert Signature					Date: Insert Date	

Reporting Requirements

Report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and mail to the State a written report containing the information requested within five (5) working days after becoming aware of the following circumstances.

All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit

a. Endangerment to Health or the Environment Circumstances leading to any non-compliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a of the Permit)

This category would primarily result from the discharge of pollutants in violation of the permit

b. Numeric Effluent Limit Violations

- Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)
- Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)
- Daily maximum violations (See Part II.L.6.d of the Permit)

Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.

Has there been an incident of non-compliance requiring 24-hour notification? [Y/N/NA](#)

Date and Time of Incident	Location	Description of Noncompliance	Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

APPENDIX 8: Delegation of Authority Form

I, [Insert Name Here](#), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the [Insert Name of Project](#) construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

[Insert Name & Title](#)

[Insert Company Name](#)

[Insert Company Address](#)

[Insert Company City, State, Zip Code](#)

[Insert Company Phone](#)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in [Insert State Permit No + City/County Stormwater Permit No](#), and that the designee above meets the definition of a **“duly authorized representative”**

APPENDIX: 9 Completed Stormwater Inspection Logs

(File completed inspection forms here)

APPENDIX 10: Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION STORMWATER MANAGEMENT PLAN (SWMP)

Project Number: _____

Project Title: Remora Connection _____

Operator(s): Williams Front Range, LLC. _____

As a subcontractor, you are required to comply with the SWMP, for any work that you perform on-site. Any person or company who violates any condition of the SWMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWMP. A copy of the SWMP is available for your review at: <https://compliancego.com/>.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWMP for the above designated project and agree to follow the CMs and practices described in the SWMP.

This certification is hereby signed in reference to the above named project:

Company: Beacon Environmental _____

Address: 7343 S Alton Way, Suite 100, Centennial, CO 80112 _____

Telephone Number: 720-500-2487 _____

Type of construction service to be provided: stormwater consulting services _____

Signature:  _____

Title: President _____

Date: 11/12/2025

APPENDIX 11: Agreement for off-site Control Measures

(if applicable)

Attach use agreement between the Permittee and the owner/operator of any control measures located outside of the permitted area, that are utilized by the Permittee's construction site for compliance with this permit, but not under the direct control of the Permittee.

The Permittee is responsible for ensuring that all control measures located outside of their permitted area, that are being utilized by the Permittee's construction site, are properly maintained and in compliance with all terms and conditions of the permit.

Include all information to any such off-site control measures located outside the permitted area, including location, installation specifications, design specifications and maintenance requirements

APPENDIX 12: Low Risk Discharge Guidance for Discharges of Potable Water

*****If Flushing New Waterlines including fire suppression lines, irrigation lines, etc , the State of Colorado Low Risk Discharge Guidance for Discharges of Potable Water must be followed.***

Discharges of potable water are short term infrequent discharges that with proper management are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard. The typical pollutant of concern is total residual chlorine, however, total suspended solids (TSS) and oil&grease may also become pollutants of concern. These pollutants can be handled using dechlorination techniques, filters, oil booms, and other control measures (CM).

The following conditions must be followed by anyone discharging potable water: The discharge of cleaning materials or chemicals, including dyes, is strictly prohibited, and shall be sent to the sanitary sewer, with permission of the local wastewater treatment facility, or otherwise collected and disposed of. Except for additional chlorine and dechlorination chemicals in accordance with manufacturer's label. The potable water shall **not** be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems. The discharge shall be from a potable water distribution system, tank or storage that has been maintained for potable water distribution use. Discharges from a distribution system, tank or storage that is used for conveyance or storage of materials other than potable water is not authorized. The discharge shall not cause erosion of a land surface. Energy dissipation devices designed to protect downstream areas from erosion y reducing velocity of flow (such as hose attachments and erosion controls), may be necessary. The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits detrimental to the beneficial uses of the state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses. All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction. This guidance in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.

If the discharge is directly to a State surface water (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine in excess of 0.011 mg/l. The operator is responsible for determining what is necessary for removing chlorine from the discharge. If the discharge is to a ditch, chlorine content may be limited by the owner of the ditch. However, if the ditch returns flow to classified state waters, it must not contain any residual chlorine in excess of 0.011 mg/l at the point where it discharges to the classified state water. Removal of residual chlorine in excess of 0.011 ml/l, must be done for any direct discharge to state surface waters or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate below 0.011 mg/l prior to reaching state surface water. Dechlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected, or by dechlorination using a portable dechlorinator. Pay particular attention when handling super-chlorinated waters. A longer time is needed to dissipate chlorine from super-chlorinated waters.

When using chemicals in the dechlorination process, the operator must ensure that proper quantities and rates are used, based on the concentration of chlorine; that adequate mixing occurs; and that enough time is allowed prior to flow reaching a surface water for the dechlorination chemicals to react with the chlorine in the water. In cases where the discharge of water that had been super-chlorinated will occur, operators should allow additional time for the chlorine to dissipate. It is the operators' responsibility to ensure that adequate processes are followed to meet the 0.011 mg/L chlorine limitation prior to discharge to classified state surface water. It is not required that an EPA approved test method be used to make this determination. For many methods, it will be necessary to have a test result indicating no (0 mg/L) residual chlorine to ensure that this limitation is met. Discharging without Testing is possible without analysis. This may be based on a determination that the given hold time or travel time to classified state water, based on other discharge-specific variables, will adequately reduce chlorine levels to result in the chlorine limitation being met. It is the operator's responsibility to ensure they understand the variables associated with a specific discharge to ensure that the chlorine limitation has been met. CMs shall be implemented as necessary to meet the conditions above, by anyone discharging potable water.

For discharge to the ground: the water shall not cause any toxicity to vegetation. When discharging, allow the water to drain slowly so that it soaks into the ground as much as possible. Dechlorination is not required for discharges into the ground if the discharge does not reach state surface water. This option should be considered as an alternative to dechlorination.

Pollutants Picked Up After Release: The discharge should be conducted to minimize the potential to pick up additional pollutants following release from the potable water distribution systems and prior to discharge to a water of the state. The discharge should be conducted to minimize the potential to pick up additional suspended solids and to control erosion. It is understood that minimal suspension of sediment is inherent to any water running across soils. However potential water quality impacts should

be minimized through practices such as diffusing flows and avoiding flows across bare soils. The discharge should be conducted to minimize the potential that it will contact petroleum products/waste, and avoid picking up any oil and grease. When possible, an absorbent oil pad, boom or similar device should be used to eliminate oil from the discharge. A visible sheen must not be evident in the discharge. The discharge shall be conducted to minimize the potential that it will not pick up any oil and grease. When possible, an absorbent oil pad, boom or similar device shall be used to eliminate oil from the discharge.

Preparing and Installing Components: When installing new pipe, fittings and appurtenances into a potable water distribution system, the components should be prepared and maintained in a way to minimize the potential for contribution of pollutants to discharges covered under this guidance. All pipe, fittings, and other appurtenances associated with the discharge should meet industry standards for cleanliness for public water. Examples of standard operating procedures include, but are not limited to, those found in ANSI/AWWA Standard C600-10, (Installation of ductile-iron mains and their appurtenances), or any other applicable standard operating procedures that reflect industry standards of cleanliness. When it is necessary to remove debris, foreign material or other gross contamination from components prior to installation, wastewater generated from such activities may not be covered under this guidance. Such activity should occur at a location that allows for generated wastewater to be sent to the sanitary sewer with permission of the local wastewater treatment facility. Such wastewater could also be otherwise collected and disposed of. Practices should be implemented during transport, storage, installation, and maintenance to minimize introduction of contaminants to pipe, fittings, and other appurtenances that could contribute pollutants to discharges.

Removing Pollutants: Control measures for filtering or settling suspended solids and other debris should be used to remove solids or other debris that have either been picked up after discharge or that originated from within the potable water system. Examples of suspended solid removal practices include check dams and filter bags. As a final measure downstream from additional control measures, inlet protection can be used to provide some additional removal and to allow for redundancy. Pollutant removal control measures should be used and maintained in accordance with manufacturers' specifications.

Alternative Disposal Options:

Water not meeting the criteria and conditions of this guidance may be sent to the sanitary sewer with permission of the local wastewater treatment facility or otherwise collected and disposed. If discharge is to the sanitary sewer, contact the local wastewater treatment facility prior to discharge. System owners may grant blanket authorization to discharge to their systems. This must be done to ensure that the facility is able to accept the discharge. Not all facilities are able to accept such discharges. Note that additional restrictions or local guidelines may apply. If the waste is collected for disposal, it may be hauled off site for disposal at a facility that is authorized to discharge the water through an existing CDPS permit or in accordance with disposal requirements administered through the Colorado Hazardous Materials and Waste Management Division. Alternatively the water may be land applied in a way that results in complete evapotranspiration. This will likely only be an option when the quantities of water are small.

Low Risk Guidance for Discharges of Uncontaminated Groundwater to Land

Applicable to:

- The source of the discharge must solely be uncontaminated groundwater or uncontaminated groundwater combined with stormwater. To be considered uncontaminated, the source must not contain pollutants in concentrations that exceed water quality standards for the applicable receiving groundwater.
- The discharge must be to land. Point source discharges to surface waters, storm sewers, or other drainage conveyance systems are not covered by this guidance.

Conditions:

Prohibition of pollutants in the discharge:

- No chemicals may be added.
- If the discharge is from vaults or similar structures, the discharge cannot be contaminated by process materials used, stored, or conveyed in the structures, or by introduced surface water runoff from outside environments that may contain oil, grease, and corrosives.
- A visible sheen must not be evident in the source water or discharge.

Exclusion of Process Discharges:

- The groundwater shall not be used in additional processes, such as any type of washing, heat exchange, or manufacturing.

Controlling the discharge:

- The groundwater discharge cannot leave the operational control of the entity administering the land application. The owner of the property where the discharge is occurring must have prior knowledge and grant permission for the land application.

- Land application must be conducted at a rate and location that does not allow for any runoff into state waters or other drainage conveyance systems, including but not limited to streets, curb and gutter, inlets, borrow ditches, open channels etc. If the land application is to agricultural land, it must not reach or have the potential to reach an agricultural ditch. Discharges to drainage conveyance systems as described above are a discharge to surface water that require a discharge permit and are not covered under this guidance document.

- Land application must be conducted at a rate that does not allow ponding of the groundwater on the surface, unless the ponding is a result of implementing control measures that are designed to reduce flow velocity. If the control measures used result in ponding, the land application must be done in an area with a constructed containment, such as an excavation or bermed area with no designed outfall. The containment shall prevent the discharge of the ponding water offsite as runoff.

Compliance with construction stormwater discharge permits: If the discharge is located at a facility covered by a CDPS General Permit for Stormwater Discharge Associated with Construction Activities, the requirements in that permit associated with the discharge of groundwater must be complied with, including identification in the Stormwater Management Plan.

Controlling erosion: The discharge shall not cause erosion of a land surface that could cause pollution of the receiving water. Signs of visible erosion that have the potential to cause pollution without downstream controls measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing velocity of flow (such as hose attachments and erosion controls) may be necessary to prevent erosion.

Controlling pollutant potential of deposited sediment: Control measures shall be implemented to prevent any sediment deposited during land application from being transported by stormwater runoff to surface waters or other conveyances.

Additional Requirements and Property Rights:

- All discharges must comply with federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.
- This guidance in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.
- The discharge shall not result in flooding of neighboring property, streets, gutters or storm sewers. The discharge must be diverted from building foundations or other areas that may be damaged from ground settling or swelling.

Implementation of Control Measures:

Identifying potentially contaminated groundwater: If the groundwater is located within 1 mile of a landfill, abandoned landfill, mine or mine tailing area, a Leaking Underground Storage Tank (LUST), Brownfield site, or other area of contamination, there is an increased likelihood that groundwater contamination exists. In those cases additional work is appropriate to determine if your dewatering area is in an area of contamination. The following is a list of contamination and plume resources and is helpful when determining if your dewatering area is in an area of contamination, however the list is not all inclusive and in some cases site-specific characterization of groundwater may be necessary. All control measures used to meet the provisions of this guidance document must be selected, installed, implemented and maintained according to good engineering, hydrologic and pollution control practices. Control measures must be adequately designed to provide control for all potential pollutant sources associated with the discharge of uncontaminated groundwater to land. Route discharge in such a way that it will not contact petroleum products/waste, a visible sheen must not be evident in the discharge. To minimize potential for creating stormwater pollution sources, control measures (such as a filter bag or similar filtration device) should be used to remove sediment/solids prior to land application. Water that does not meet the criteria of this guidance or that cannot be discharged in a manner that meets the conditions of this guidance must be either authorized by a Colorado Discharge Permit System (CDPS) discharge permit issued by the division or disposed of through an alternative means. The Water Quality Control Division has general permits available for discharges to surface water and/or land associated with construction dewatering, subterranean structure/foundation dewatering, and the remediation of groundwater. Obtaining coverage one of these permits will likely be the most efficient solution for discharges that do not meet the criteria and conditions of this guidance. For discharges associated with construction projects, guidance on determining the appropriate permit and Application Guidance Document for these general permits, visit: <https://www.colorado.gov/pacific/cdphe/wq-construction-general-permits>. Discharges from subterranean structures (basement, foundation, footer drains, etc.) are covered by the Subterranean Dewatering or Well Development general permit. Visit: <https://www.colorado.gov/pacific/cdphe/clean-water-commerce-and-industry-permitting>

APPENDIX 13: Erosion and Sediment Control Standard Notes

Adams County Erosion Control Plan - General Notes:

- 1) All construction projects, regardless of the size, shall install, maintain and repair stormwater pollution **control measures (CMs)** to effectively minimize erosion, sediment transport, and the release of pollutants related to construction activity. CMs example include: sediment control logs (SCL), silt fence (SF), dikes/swales, sediment traps (ST), inlet protection (IP), outlet protection (OP), check dams (CD), sediment basins (SB), temporary/permanent seeding and mulching (MU), soil roughening, maintaining existing vegetation and protection of trees. CMs must be selected, designed, adequately sized, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. CMs/BMPs installation and maintenance details shall conform to Urban Drainage Flood Control Criteria Manual Volume 3, or the Colorado Department of Transportation (CDOT) Item Code Book. CMs must filter, settle, contain or strain pollutants from stormwater flows in order to prevent bypass of flows without treatment. CMs must be appropriate to treat the runoff from the amount of disturbed area, the expected flow rate, duration, and flow conditions (i.e., sheet or concentrated flow). CMs/BMPs **shall be specified in the SWMP (if applicable), and the locations shown on the EC Plan.**
- 1) Prior to construction, projects disturbing 1 or more acres of land, or any project belonging to a common plan of development disturb 1 or more acres, must obtain:
 - A General **Permit** for Stormwater Discharges associated with Construction Activities, from the Colorado Department of Public Health and Environment, and
 - An Adams County Stormwater Quality Permit within the unincorporated Adams County MS4 Area.
- 2) Permitted projects shall develop a Stormwater Management Plan (**SWMP**), aka Erosion and Sediment Control Plan (ESCP), in compliance with CDPHE minimum requirements. The approved SWMP, including Erosion Control (EC) Plan (Site Map), shall be **kept** on site and **updated** at all times. The **Qualified Stormwater Manager** is responsible for implementing the SWMP and CMs (aka BMPs) during construction.
- 3) Permitted projects shall perform regular **Stormwater Inspections** every 7 calendar days; **or** every 14 calendar days and within 24 hours after any precipitation or snowmelt event that causes surface erosion. Inspection frequency can be reduced for **Post-Storm Event inspections at Temporarily Idle Sites** and also for **Stormwater Inspections at Completed Sites waiting for final stabilization**. Inspection reports must identify any incidents of non-compliance.
- 4) **Tracking** of dirt onto paved public or private paved roads is not allowed. The use of dirt ramps to enter/exit from an unpaved into a paved area is prohibited. Vehicle tracking controls shall be implemented, otherwise entrance area must drain thru a CM towards the private site.
- 5) **Truck loads** of fill material imported to or cut material exported from the site shall be properly covered to prevent loss of the material during transportation on public ROW. Haul routes must be permitted by the County. No material shall be transported to another site without applicable permits.

- 6) Control measures designed for **concrete washout waste** must be implemented. This includes washout waste discharged to the ground and washout waste from concrete trucks and masonry operations.
- 7) Temporary **CMs/BMPs shall be removed** after the site has reached final stabilization.
- 8) **Dewatering operations** discharging off-site into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, require a State Construction Dewatering Permit.
- 9) Permitted projects shall **keep** the CDPHE's Stormwater Discharge Permit, Stormwater Management Plan (SWMP) and inspection logs available on-site throughout the duration of the project, and for an additional 3 years after permit close-out.
- 10) Permitted landowner and/or contractor shall **close** the State and City/County permit once **final stabilization** is reached. Stormwater inspections shall continue until Inactivation Notice is filed with CDPHE.

Performance Standard Notes:

1. Stormwater runoff from disturbed areas must flow to at least **one (1)** CM to minimize sediment in the discharge. Do not allow **sediment to leave** the site. The best way to prevent sediment or pollutants from entering the storm sewer system is to stabilize the site as quickly as possible, preventing erosion and stopping sediment run-off at its source.
2. **Phase construction to minimize disturbed areas**, including disturbance of steep slopes. (i.e. the entire project site should not be disturbed if construction will only be occurring in one particular section of the site). Limit soil exposure to the shortest possible period of time. Protect natural features and **existing vegetation** whenever possible. Removal of existing vegetation shall be limited to the area required for immediate construction operations. Maintain pre-existing vegetation (or equivalent CMs) for areas within 50 horizontal ft of receiving waters.
3. **Soil compaction** must be minimized for areas where infiltration CMs will occur or where final stabilization will be achieved through vegetative cover.
4. All **soil imported** to or **exported** from the site shall be properly covered to prevent the loss of material during transport.
5. **Dust** emissions resulting from grading activities or wind shall be controlled.
6. **Install construction fence** (orange) to protect wetlands and other sensitive areas and to prevent access, and to delineate the Limits of Construction. Do not use silt fence to protect wetlands since trenching may impact these areas.
7. CMs intended to capture overland, low velocity **sheet flow** at a fairly level grade shall only be installed along contours.
8. Install CMs, such as **check dams**, perpendicular to the **concentrated flows** to reduce flow velocity.
9. Storm drain **inlets** within and adjacent to the construction site must be protected. Any ponding of stormwater around inlet protection must not cause excessive flooding or damage adjacent areas or structures.
10. Install **Vehicle Tracking Control (VTC)** to enter/exit unpaved area. Do not use recycled crushed concrete or asphalt millings for vehicle tracking pads.

11. **Straw bales** shall not be used for primary erosion or sediment control (i.e. straw bales may be used for reinforcement behind another BMP such as silt fence).
12. **Outlets** systems (such as skimmer or perforated riser pipe) shall be installed to withdraw water from or near the surface level when discharging from basins. Water cannot drain from the bottom of the pond.
13. **Temporary stabilization** must be implemented for earth disturbing activities on any portion of the site where land disturbing activities have permanently or temporarily ceased (for more than 14 calendar days). Temporary stabilization methods examples: tarps, soil tackifier, and hydroseed. Temporary stabilization requirement may **exceed** the 14-day schedule when either the function of the specific area requires it to remain disturbed, or, physical characteristics of the terrain and climate prevent stabilization as long as the constraints and alternative schedule is documented on the SWMP, and locations are identified on the EC Plan (site map).
14. Runoff from **stockpile area** must be controlled. Soils that will be stockpiled for more than 30 days shall be protected from wind and water erosion within 14 days of stockpile construction. Install CMs/BMPs 5 ft away from the toe of the stockpile's slope.
15. Water use to clean concrete trucks shall be discharged into a **concrete washout area** (CWA). The predefined containment area must be identified with a sign, and shall allow the liquids to evaporate or dry out. CWA discharges that may reach groundwater must flow through soil that has buffering capacity prior to reaching groundwater. The concrete washout location shall be not be located in an area where shallow groundwater may be present and would result in buffering capacity not being adequate, such as near natural drainages, springs, or wetlands. In this case, a liner underneath is needed for areas with high groundwater levels. CWA shall not be placed in low areas, ditches or adjacent to state waters. Place CWA 50 ft away from state waters.
16. **Waste**, such as building materials, workers trash and construction debris, must be properly managed to prevent stormwater pollution.
17. Install **stabilized staging area (SSA)** to store materials, construction trailer, etc.
18. If conditions in the field warrant additional CMs/BMPs to the ones originally approved on the SWMP or EC Plan (civil drawing), the landowner or contractor shall implement measures determined necessary, as **directed by the County**.
19. Permanent CMs/BMPs for slopes, channels, ditches, or disturbed land area shall be performed immediately after final grading. Consider the use **erosion control blankets** on slopes 3:1 or steeper and areas with **concentrated flows** such as swales, long channels and roadside ditches.
20. The discharge of **sanitary waste** into the storm sewer system is prohibited. Portable toilets must be provided, secured and placed on permeable surfaces, away from the curbside, storm inlets and/or drainage ways.
21. **Remove temporary CMs/BMPs** once final stabilization is reached, unless otherwise authorized.
22. **Final stabilization** must be implemented. Final stabilization is reached when all soil disturbing activities have been completed, and either a uniform vegetative cover has been established with an individual plant density of at least 70% of pre-disturbance levels, or equivalent permanent alternative method has been implemented.

23. Provide **spill prevention** and containment measures for construction materials, waste and fuel storage areas. **Bulk storage** (55 gallons or greater) of petroleum products and liquid chemicals must have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters.
24. **Report** spills or releases of chemical, oil, petroleum product, sewage, etc., which may reach the storm sewer or enter state waters within **24-hours** from time of discovery. Guidance available at www.cdphe.state.co.us/emp/spillsandreleased.htm. State of Colorado Spill-line: 1-877-518-5608. Adams County Stormwater Hotline: 720-523-6400; Public Works 303-453-8787 and the Tri-County Health Department at 303-220-9200.

Maintenance Standard Notes:

1. Maintain and repair CMs according to approved Erosion Control Plan (civil drawing) to assure they continue performing as originally intended.
2. CMs/BMPs requiring maintenance or adjustment shall be **repaired immediately** after observation of the failing BMP.
3. CMs shall be cleaned when sediment levels accumulate to **half the design** unless otherwise specified.
4. SWMP and EC plan shall be continuously **updated** to reflect new or revised CMs/BMPs due to changes in design, construction, operation, or maintenance, to accurately reflect the actual field conditions. A notation shall be made in the SWMP, including date of changes in the field, identification of the CMs removed, modified or added, and the locations of those CMs. Updates must be made within 72-hours following the change.
5. Maintain **Vehicle Tracking Control (VTC)**, if sediment tracking occurs, clean-up immediately. Sweep by hand or the use street sweepers (with vacuum system). Flushing off paved surfaces with water is prohibited.
6. **CWA** must be cleaned once waste accumulation reaches $\frac{3}{4}$ of the wet storage capacity of the structure. Legally disposed of concrete waste. Do not bury on-site.
7. **Clean-up spills** immediately after discovery, or contain until appropriate cleanup methods can be employed. Follow Manufacturer's recommended methods for spill cleanup, along with proper disposal methods. **Records** of spills, leaks, or overflows that result in discharge of pollutants must be documented and maintained.
8. Remove sediment from storm sewer infrastructure (ponds, storm pipes, outlets, inlets, roadside ditches, etc.), and restore volume capacity upon completion of project or prior to initial acceptance of public improvements (if applicable). Do not flush sediment offsite, capture on-site and disposed of at an approved location.

These notes are not intended to be all-inclusive, but to highlight the basic stormwater pollution prevention requirements for construction activities to **comply** with CDPS Stormwater Construction Permit and be in **conformance** with County standards.